WBS No: 1BAD01 Activity ID: 1B07A00500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter

1BAD Activity Filter

Starts In FY

WBS No: 1BADO	11 Title: Decommissioning Set 1 M	odule A										
Activity ID: 1B07	TA00500 Description: IWCP Development - Modul	e A						Cost Risk	2 Schedule R	Risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEAPL0	D&D A MODULE SET 1 PLANNING & ENGINEERING	1.00	each	HC	5.363	5.363	159.477	473.135	0	632.612	65.296	697.907
SYS	Contingency And Escalation	1.00	1.00 ea		0	0	0	0	79.913	79.913	0	79.913
	То	tal for Activi	al for Activity 1B07A00500:			5.363	159.477	473.135	79.913	712.525	65.296	777.820

Line Item 2CDPEAPL0 - D&D A MODULE SET 1 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
L	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	327.30	Hours
نم	Factors	1 Engineer		1091 hours		0.3 adi Factor			
L	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	847.00	Hours
į	Factors	1 enaineer		847 hours		T			
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	828.80	Hours
À	Factors	1 enaineer		1657.6 hours		0.5 adi. Factor			
L	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	2.323.00	Hours
À	Factors	4 Engineers		2323 hours		0.25 adi. Factor			
L	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	956.80	Hours
À	Factors	2 Admin Assist.		2392 hours		0.2 adi. Factor			
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
ď	Factors			40 hours		T.			
L	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S		Linear	211.258.50	Dollars
ď	Factors	6 planners		1987.5 hours		63.27 Dollars per hour	0.28 adi. Factor		
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
ď	Factors	105623 dollars		0 adi. Factor		T.			
L	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	26.082.32	Dollars
ď	Factors	1637 hours		53.11 \$/hr		0.3 adi. Factor			
L	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	90.538.30	Dollars
ď	Factors	1270 hours		71.29 \$/hr					
L	A5H	SUBCONTRACTED SRVS	E070	INCOLUNIONE ENCOUREENC	KB50S	B707 Eng Envir. Sftv & Quality	Linear	90.551.67	Dollars
ď	Factors	2487 hours		72.82 \$/hr		0.5 adi. Factor			
L	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	24.532.82	Dollars
À	Factors	785 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safety		
L	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	30.170.88	Dollars
ř	Factors	972 hours		77.6 \$/hr		0.4 adi. Factor		J	
L	A5H	SUBCONTRACTED SRVS		OTHER ENGINEERS		B707 Facility Disposition	Linear	0.00	Dollars

Factors 466000 Powertool balance adj. adj factor for 11.9 % reduction

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	53,559.08	Dollars
	Factors	53559.1 Dollars							

WBS No: 1BAD01 Rockv Flats Closure Proiect Proiect Baseline Cost and Basis of Estimate Proiect Baseline Cost and Baseline Cost and Basis of Estimate Proiect Baseline Cost and Baseline Cost a

ESC ESCALATION 0000 NONE ZDEPT No Department Linear 26.353.77 Dollars

Factors 26353.8 Dollars

Activity ID: 1B0	Description: Glovebox and equipment str	ripout - Mod	u					Cost Risk	2 Schedule R	isk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDACV0	Remove Chainvevors to SR	1.00	each	HC	56.594	56.594	1.404.909	440.767	0	1.845.676	530.423	2.376.099
2CDEDADC0	Decontaminate Set	1.00	each	HC	2.396	2.396	54.490	19.267	0	73.757	20.573	94.330
2CDEDADR0	Duct Removal	1.00	each	HC	5.122	5.122	119.567	31.365	0	150.932	45.143	196.075
2CDEDAEA0	Electrical & Alarms	1.00	each	HC	10.198	10.198	239.586	60.581	0	300.167	90.456	390.622
2CDEDAEE0	External Equipment Removal	1.00	each	HC	886	886	20.581	10.232	0	30.812	7.770	38.583
2CDEDAIE0	GB Internal Equipment Removal	1.00	each	HC	4.096	4.096	96.060	41.541	0	137.601	36.267	173.869
2CDEDAIP0	Reduce GB In Place	1.00	each	HC	34.616	34.616	807.841	359.243	0	1.167.084	305.000	1.472.085
2CDEDAPR0	Pipe Removal	1.00	each	HC	3.536	3.536	82.215	26.033	0	108.248	31.040	139.288
2CDEDASR0	Remove GB to Size Reduce	1.00	each	HC	17.175	17.175	430.196	185.590	0	615.786	162.420	778.207
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	808.284	808.284	0	808.284
	То	tal for Activi	ty 1B07A02	500:		134.619	3.255.446	1.174.618	808.284	5.238.348	1.229.093	6.467.440

Line Item 2CDEDACV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	150.00	Hours
Factor	s 150 Hours								
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	10.314.00	Hours
Factor	10314 Hours		T		1				
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	411.00	Hours
Factor	s 411 Hours	1			T				
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition		Linear	2.597.40	Hours
Factor		ı	0.9 adi. to allocate Waste Ops for		T T				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	7.052.27	Hours
Factor		ı	0.69645 4 to 1 adi. Factor		T T				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	17.887.00	Hours
Factor									
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	30.00	Hours
Factor		ı							1
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	2.063.00	Hours
Factor		1	I		I				1
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	82.00	Hours
Factor			I		I				I
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KD10H			Linear	1.512.00	Hours
Factor			3 shifts		9 hours/shift	28	GB equivalents		I
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project		Linear		Hours
Factor			3 shifts	1/2000	9 hours/shift	28	GB equivalents		I
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	577.00	Hours
<u>Factor</u>	s 577 Hours								

Page 2 of 145 6/22/00 9:31:03 PM *OFFICIAL USE ONLY*

WBS No: 1BAD01 Rocky Flats Closure Project Project Baseline Devl Activity ID: 1B07A02500 Raseline Cost and Basis of Estimate WBS Filter 1BAD

	Baseline Cost ar	nd Basis of Estimate Activity Filter	. *	Starts In FY *
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	2.025.00 Hours
Factors 2025 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	1.512.00 Hours
Factors 2 RCTs	3 shifts	9 hours/shift	28 GB equivalent	S
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	3.577.00 Hours
Factors 3577 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	6.048.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	28 GB equivalent	S
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	52.500.00 Dollars
Factors 625 dollars/shift	3 shifts		28 GB equivalent	S
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	206.868.30 Dollars
Factors 1070705 Dollars	0.38 adi. Factor	0.50844 adi. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	181.399.00 Dollars

Factors 181399 Dollars

Line Item 2CDEDADC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00 Hours
r	Factors	32 Hours						
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
	Factors	118 Hours						
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	382.50 Hours
r	Factors	275 Hours		1.39091 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.498.00 Hours
r	Factors	1498 Hours		T				
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00 Hours
Г	Factors	6 Hours		T		T		
Ļ	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00 Hours
Г	Factors	4 Hours		T		T T		<u> </u>
Ļ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours
Г	Factors	55 Hours		T		T T		<u> </u>
L	751	OVERTIME BASE & PRE.	T060	ID&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	300.00lHours
ſ	Factors	300 Hours		I				
L	A5C	SUPPLIES	0000	INONE	KB30S	B707 Facility Disposition	Linear	19.267.13 Dollars
	Factors	46993 Dollars		0.41 adi. Factor				

Line Item 2CDEDADR0 - Duct Removal

BOE Hist

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Page 3 of 145 6/22/00 9:31:04 PM *OFFICIAL USE ONLY*

WBS No: 1BAD01 Activity ID: 1B07A02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY

Resources

ľ
Units
0 Hours
5 Hours
0Hours
т.
0Hours
<u> </u>
0lHours
<u></u>
0lHours
0 Hours
JIHOUIS
0 Hours
JII IOUIS
0 Hours
4 Dollars
0(

Line Item 2CDEDAEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	329.00 Hours
Factors	329 Hours						
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.756.00 Hours
Factors	1756 Hours						
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	256.00 Hours
Factors	256 Hours						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	855.00 Hours
Factors	950 Hours		0.9 adi. to allocate Waste Ops for	oremen			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.368.01 Hours
Factors	2460 Hours		0.5561 4 to 1 adi. Factor				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	3.662.00 Hours
Factors	3662 Hours						

Baseline Devl WBS No: 1BAD01 Proiect **Rocky Flats Closure Project** 1B07A02500 1BAD Activity ID: WBS Filter Resoline Cost and Resis of Estimate

		Baseline Cost an	u Dasis	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours						
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	66.00 Hours
Factors 66 Hours						
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	351.00 Hours
Factors 351 Hours						
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	51.00 Hours
Factors 51 Hours						
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	190.00 Hours
Factors 190 Hours						
751 OVERTIME BASE & PRE.	T050 F	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	492.00 Hours
Factors 492 Hours						
751 OVERTIME BASE & PRE.	T060 [D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	732.00 Hours
Factors 732 Hours				T		
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	60.580.52 Dollars
Factors 245319 Dollars		0.41 adi Factor		0.60231 adi To remy Waste costs		

0.41 adi. Factor 0.60231 adj. To remv. Waste costs

Line Item 2CDEDAEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

_	Cost Element		Skill		Daniel	C	Quantity Units
S		0000		I/D40II	Department -	Curve	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00lHours
Factors	15 Hours		I		I		
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	255.00lHours
Factors			1				
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	6.00 Hours
Factors	6 Hours						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	36.00 Hours
Factors	36 Hours		1				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	132.75 Hours
Factors	242 Hours		0.54855 4 to 1 adi. Factor				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	276.00 Hours
Factors	276 Hours						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 Hours
Factors	3 Hours						
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	51.00 Hours
Factors	51 Hours						
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	1.00 Hours
Factors	1 Hours						
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	7.00 Hours
Factors	7 Hours						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	48.00 Hours
Factors							
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	55.00 Hours
Factors							

Page 5 of 145 6/22/00 9:31:05 PM OFFICIAL USE ONLY WBS No: 1BAD01 Proiect **Rocky Flats Closure Project** Activity ID: 1B07A02500 **Baseline Cost and Basis of Estimate**

WBS Filter 1BAD Activity Filter

Baseline Devl

Starts In FY

A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition 10 231 55 Dollars Linear Factors 24955 Dollars 0.41 adi. Factor

Line Item 2CDEDAIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours					1		
Ĺ	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.127.00	Hours
г	Factors	1127 Hours		1		1	T		
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	62.00	Hours
г	Factors	62 Hours							
L	750	STRAIGHT TIME BASE	M010			B707 Facility Disposition	Linear	268.20	Hours
Ē	Factors	298 Hours		0.9 adi. to allocate Waste Ops for		1			
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	593.00	Hours
F	Factors	1186 Hours		0.5 4 to 1 adi. Factor		1			
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.245.00	Hours
Г	Factors	1245 Hours				1			
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
Г	Factors	3 Hours							
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	225.00	Hours
Ī	Factors	225 Hours							
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	12.00	Hours
Г	Factors	12 Hours		I		I			
Ļ	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	60.00	Hours
ſ	Factors	60 Hours	Topo	DADIATION CONTROL TECHNICION	KDEOLL	D707 F F : 00 0 0 15	1.	007.00	
Ļ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	237.00	Hours
ſ	Factors	237 Hours	T000	DAD HAZ DEDIJO TEOH / DIOK DED	KDOOLI	DZOZ E W D' W	1.	0.40.00	
Ļ	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	249.00	Hours
ſ	Factors	249 Hours	0000	NONE	KD200	B707 Facility Disposition	Linear	OF 040 40	Dellere
Ļ	_	SUPPLIES Pollers	0000		VB302		Linear	25.213.19	Dollars
ſ	Factors	85886 Dollars SUBCONTRACTED SRVS	F130	0.41 adi. Factor OTHER ENGINEERS	KDanc	0.71601 adi. To remv. Waste costs B707 Facility Disposition	Linear	16.328.00	Dellere
L	HCA	ISUBCONTRACTED SRVS	E130	IOTHER ENGINEERS	ND305	D/U/ Facility Disposition	Linear	10.328.00	Dollars

Factors 16328 Dollars

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Line Item 2CDEDAIP0 - Reduce GB In Place

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Cost Element Skill Units Resources Department Curve

WBS No:1BAD01Rockv Flats Closure ProjectProjectBaseline DevlActivity ID:1B07A02500Baseline Cost and Basis of EstimateWBS Filter1BAD

	Daselille Cost	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	80.00 Hours
Factors 80 Hours				
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	7.927.00 Hours
Factors 7927 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. W	/S KB20H B707 Facilities Management	Linear	354.00 Hours
Factors 354 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	2.404.80 Hours
Factors 2672 Hours	0.9 adi. to allocate Waste Op	s foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Eng Envir. Sftv & Quality	Linear	5.100.50 Hours
Factors 7872 Hours	0.64793 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	D KB30H B707 Facility Disposition	Linear	12.475.00 Hours
Factors 12475 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	16.00 Hours
Factors 16 Hours	T T			
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.585.00 Hours
Factors 1585 Hours	T T			
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. W	S KB20H B707 Facilities Management	Linear	71.00 Hours
Factors 71 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	534.00 Hours
Factors 534 Hours	T			
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Eng Envir. Sftv & Quality	Linear	1.574.00lHours
Factors 1574 Hours	T			
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	D KB30H B707 Facility Disposition	Linear	2,495.00 Hours
Factors 2495 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	189,870.90 Dollars
Factors 950906 Dollars	0.41 adj. Factor	0.48701 adj. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	169,372.00 Dollars
Factors 169372 Dollars				

Factors 169372 Dollars

Line Item 2CDEDAPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

babis for adjustment								
S Cost Element		Skill		Department	Curve	Ouantity Units		
750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.967.00 Hours		
Factors 1967 Hours				_				
750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	69.00 Hours		
Factors 69 Hours				_				
750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	259.20 Hours		
Factors 288 Hours		0.9 adi. to allocate Waste Ops for	oremen	_				
750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	525.00 Hours		
Factors 456 Hours		1.15132 4 to 1 adi. Factor						
750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00 Hours		
Factors 133 Hours								
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	393.00 Hours		
Factors 393 Hours								

Page 7 of 145 6/22/00 9:31:06 PM *OFFICIAL USE ONLY*

WBS No: 1BAD01 Rockv Flats Closure Proiect Proiect Baseline Devl Activity ID: 1B07A02500 Baseline Cost and Basis of Estimate

		Baseline cost ai	ia Basis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	14.00 Hours
Factors 14 Hours			1			
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	58.00 Hours
Factors 58 Hours			1			
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	91.00 Hours
Factors 91 Hours				T		
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours				T		
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	26.032.54 Dollars
Forton CO404 Dellara		0.44 adi Fastar				

Factors 63494 Dollars 0.41 adj. Factor

Line Item 2CDEDASR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		Skill		Department		Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	47.00	Hours
Factor	rs 47 Hours		_						
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	3.719.00	Hours
Factor	rs 3719 Hours								
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	149.00	Hours
Factor	rs 149 Hours								
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	996.30	Hours
Factor	rs 1107 Hours		0.9 adi. to allocate Waste Ops f	oremen					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	2.058.00	Hours
Factor	rs 3137 Hours	ı	0.65604 4 to 1 adi. Factor	T					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	4.513.00	Hours
Factor	rs 4513 Hours	ı		T					
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	9.00	Hours
Factor	rs 9 Hours	ı		T					
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	744.00	Hours
Factor	rs 744 Hours	ı		T					
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	30.00	Hours
Factor	rs 30 Hours		T						
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KD10H	776 Complex Steelworkers		Linear	486.00	Hours
Factor	rs 2 waste inspectors	ı	3 shifts	T	9 hours/shift	9	GB equivalents		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project		Linear	243.00	Hours
Factor	rs 1 foreman		3 shifts	1	9 hours/shift	9	GB equivalents	1	
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	221.00	Hours
Factor	rs 221 Hours		T-	1				1	
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	627.00	Hours
Factor	rs 627 Hours		T	1		1	T		
751		T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers		Linear	486.00	Hours
Factor	rs 2 RCTs		3 shifts	1	9 hours/shift	9	GB equivalents		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	903.00	Hours
Factor	rs 903 Hours								

Page 8 of 145 6/22/00 9:31:07 PM *OFFICIAL USE ONLY*

WBS No: 1BAD01 Proiect **Rocky Flats Closure Project** Activity ID: 1B07A02500 **Baseline Cost and Basis of Estimate**

Baseline Devl WBS Filter 1BAD

		# _# _# _# _# _# _# _# _# _# _# _# _# _#	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.944.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	9 GB equivalents	,
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	16.875.00 Dollars
Factors 625 dollars/shift	3 shifts		9 GB equivalents	,
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	98.846.24 Dollars
Factors 387430 Dollars	0.41 adi. Factor	0.62228 adi. To remv. Was	te costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	69.869.00 Dollars

69869 Dollars Factors

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	548.557.60	Dollars
	Factors	548558 Dollars							
ĺ	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	259.725.90	Dollars

259726 Dollars

Activity ID: 1B0	7A03500 Description: IWCP Execution Trades - M	odule A						Cost Risk	2 Schedule R	isk 2		
Line Item	Description	Quantity	Units E	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			7	rype	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETADC0	Decontaminate Set	1.00	each	HC	0	0	0	143.017	0	143.017	0	143.017
2CDETADR0	Duct Removal	1.00	each	HC	0	0	0	25.378	0	25.378	0	25.378
2CDETAEA0	Electrical & Alarms	1.00	each	HC	0	0	0	212.530	0	212.530	0	212.530
2CDETAEE0	External Equipment Removal	1.00	each	HC	0	0	0	17.768	0	17.768	0	17.768
2CDETAPR0	Pipe Removal	1.00	each	HC	0	0	0	18.699	0	18.699	0	18.699
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	103.716	103.716	0	103.716
	Tot	al for Activit	tv 1B07A03500):		0	0	417.392	103.716	521.108	0	521.108

Line Item 2CDETADC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Ouantity Units
137.017.00 Dollars
6.000.00 Dollars
_

Factors 6000 dollars

Line Item 2CDETADR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Skill Resources Cost Element Department Curve Units WBS No: 1BAD01 Rockv Flats Closure Project Project Baseline Devl 1B07A03500 Baseline Cost and Basis of Estimate

Baseline Cost and Basis of Estimate Activity Filter * Starts In FY											
A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	19.378.00	Dollars			
Factors	19378 Dollars										
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars			

Factors 6000 Dollars

Line Item 2CDETAEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	206.530.10	Dollars
	Factors	333113 Dollars		0.62 adi. Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETAEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Factors 6000 dollars

Resources

es		Cost Element			Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	11.768.40	Dollars
	Factors	28020 Dollars		0.42	adi. Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Line Item 2CDETAPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element Skill			Department	Curve	Quantity	Units	
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	12.699.00	Dollars
	Factors	12699 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item SYS - Contingency And Escalation

BOE

Page 10 of 145 6/22/00 9:31:08 PM *OFFICIAL USE ONLY*

WBS No: 1BAD01 Baseline Devl Proiect **Rocky Flats Closure Project** 1BAD Activity ID: 1B07A03500 WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter

Resources	Cost Element	Skill	Department	Curve	Quantity Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	71.043.63 Dollars
	Factors 71043.6 Dollars				
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	32 672 33 Dollars

32672.3 Dollars

WBS No: 1BAD	02 Title: Decommissioning Set 2 M	odule B										
Activity ID: 1B07	7B00500 Description: IWCP Development - Modul	е В						Cost Risk	2 Schedule B	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEBPL0	D&D B MODULE SET 2 PLANNING & ENGINEERING	1.00	each	НС	4.416	4.416	131.187	388.256	0	519.443	43.725	563.168
SYS	Contingency And Escalation		ea	EE	0	0	0	0	106.629	106.629	0	106.629
Tot			ty 1B07B005	500:		4,416	131,187	388,256	106,629	626,072	43,725	669,796

Line Item 2CDPEBPL0 - D&D B MODULE SET 2 PLANNING & ENGINEERING

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

	G . FI		OLUI		n		
? s	Cost Element	E020	Skill	04000	Department SSOC Salaried	Curve	Ouantity Units
,		E020	CIVIL ENGINEERS 896 hours	51005		Linear	268.80 Hours
Factor		E0.40	1000	04000	0.3 adi Factor		005 0011
750		E040	ELECTRICAL ENGINEERS	\$100\$	SSOC Salaried	Linear	695.00 Hours
Factor			695 hours	04000	00000111		200 2011
750		E070	MECHANICAL ENGINEERS	\$1008	SSOC Salaried	Linear	680.00 Hours
Factor		= 400	1360 hours	1/2000	0.5 adi. Factor		
750		E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.907.00lHours
Factor		0010	1907 hours	1/2000	0.25 adi. Factor		
750		G010	7.5	KB30S		Linear	785.20 Hours
Factor			1963 hours	1/20011	0.2 adi. Factor		20 2011
750		1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00lHours
Factor			40 hours		I		
A57		P070	ICOST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	173.364.90 Dollars
Factor			1631 hours		63.27 Dollars per hour	0.28 adi. Factor	
A5C		0000	INONE	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
Factor			0 adi. Factor				
_A5H		E020	ICIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	21.398.02 Dollars
Factor			53.11 \$/hr		0.3 adi. Factor		
A5H		E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	74.284.18 Dollars
Factor			71.29 \$/hr				
A5H		E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	74.312.81 Dollars
Factor			72.82 \$/hr		0.5 adi. Factor		
A5H		E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	20.126.29 Dollars
Factor			96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safety	
A5H		E120	IO/ III E I I E I I E I I E I I E I I E I I E I I E I	KB50S	B707 Eng Envir. Sftv & Quality	Linear	24.769.92 Dollars
Factor			77.6 \$/hr		0.4 adj. Factor		
A5H		E130	OTHER ENGINEERS		B707 Facility Disposition	Linear	0.00 Dollars
Factor	s 474698 Powertool balance adj.		0 adj factor for 11.9 % reduction	on			

Page 11 of 145 6/22/00 9:31:09 PM OFFICIAL USE ONLY

Starts In FY

WBS No: 1BAD02 1B07B00500 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources Cost Element Skill Department Curve	Ouantity Units
CON CONTINGENCY 0000 NONE ZDEPT No Department Linear	67.105.80 Dollars
Factors 67105.8 Dollars	
ESC ESCALATION 0000 NONE ZDEPT No Department Linear	39.522.72 Dollars

Factors 39522.7 Dollars

Activity ID: 1B0	7B02500 Description: Glovebox and equipment st	ripout - Mod	lu					Cost Risk	2 Schedule F	risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDBCV0	Remove Chainvevors to SR	1.00	each	HC	46.159	46.159	1.183.522	416.830	0	1.600.352	378.179	1.978.530
2CDEDBDC0	Decontaminate Set	1.00	each	HC	2.396	2.396	54.490	22.087	0	76.577	17.412	93.988
2CDEDBDR0	Duct Removal	1.00	each	HC	4.255	4.255	99.226	40.292	0	139.518	31.706	171.224
2CDEDBEA0	Electrical & Alarms	1.00	each	HC	10.920	10.920	256.727	74.875	0	331.602	82.034	413.636
2CDEDBEE0	External Equipment Removal	1.00	each	HC	6.067	6.067	140.332	42.157	0	182.489	44.841	227.331
2CDEDBIE0	GB Internal Equipment Removal	1.00	each	HC	2.126	2.126	49.843	31.120	0	80.964	15.927	96.890
2CDEDBIP0	Reduce GB In Place	1.00	each	HC	23.359	23.359	545.611	240.313	0	785.924	174.343	960.267
2CDEDBPR0	Pipe Removal	1.00	each	HC	5.016	5.016	116.595	32.190	0	148.785	37.257	186.042
2CDEDBSR0	Remove GB to Size Reduce	1.00	each	HC	14.452	14.452	352.566	139.025	0	491.591	112.658	604.249
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.039.722	1.039.722	0	1.039.722
	To	tal for Activ	ity 1B07B02	500:		114,749	2.798.914	1.038.888	1.039.722	4.877.524	894.356	5.771.880

Line Item 2CDEDBCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Dabi	,				
es	Cost Element	Skill	Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	82.00 Hours
Factors	s 82 Hours	<u> </u>			
750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	7.818.00 Hours
Factors	7818 Hours	<u> </u>			
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	282.00 Hours
Factors	s 282 Hours	<u> </u>			
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	2.022.30 Hours
Factors	s 2247 Hours	0.9 adi. to allocate Waste Ops	foremen		
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	5.144.75 Hours
Factors	7388 Hours	0.69637 4 to 1 adi. Factor			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	12.761.00 Hours
Factors	s 12761 Hours	1			
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	16.00 Hours
Factors	s 16 Hours	1			
751	OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.564.00 Hours
Factors	s 1564 Hours	1			
751	OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Management	Linear	56.00 Hours
Factors	s 56 Hours				
751	OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KD10H 776 Complex Steelworkers	Linear	1,836.00 Hours
Factors	y 2 waste inspectors	3 shifts	9 hours/shift	34 GB equivalen	ts

WBS No:1BAD02Rocky Flats Closure ProjectProjectBaseline DevlActivity ID:1B07B02500Baseline Cost and Basis of EstimateWBS Filter1BAD

	Baseline Cost an	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	K399S Building 776 Project	Linear	918.00 Hours
Factors 1 foreman	3 shifts	9 hours/shift	34 GB equivalents	
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	449.00 Hours
Factors 449 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	1.478.00 Hours
Factors 1478 Hours			1	
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	1.836.00 Hours
Factors 2 RCTs	3 shifts	9 hours/shift	34 GB equivalents	
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	2.552.00 Hours
Factors 2552 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	7.344.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	34 GB equivalents	
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	63.750.00 Dollars
Factors 625 dollars/shift	3 shifts		34 GB equivalents	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	192.277.80 Dollars
Factors 949527 Dollars	0.47 adi. Factor	0.43085 adi. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	160.802.00 Dollars

Factors 160802 Dollars

Line Item 2CDEDBDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	32.00 Hours
Factors 32 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROU	JP KB30S B707 Facility Disposition	Linear	118.00 Hours
Factors 118 Hours				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOL	IGI KB50H B707 Eng Envir. Sftv & Quality	Linear	382.50 Hours
Factors 275 Hours	1.39091 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RE	ED KB30H B707 Facility Disposition	Linear	1.498.00 Hours
Factors 1498 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	6.00 Hours
Factors 6 Hours			T	
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROU	JP KB30S B707 Facility Disposition	Linear	4.00 Hours
Factors 4 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLI	IGI KB50H B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours
Factors 55 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RE	ED KB30H B707 Facility Disposition	Linear	300.00 Hours
Factors 300 Hours			1	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	22.086.71 Dollars
Factors 46993 Dollars	0.47 adi, Factor			

Line Item 2CDEDBDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

WBS No: 1BAD02 1B07B02500 Activity ID:

Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate** Activity Filter

Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
Factor	s 15 Hours	_			1		
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.750.00 Hours
Factor	s 1750 Hours		_				
750		L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	111.00 Hours
Factor			1		1		
750		M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	290.70 Hours
Factor			0.9 adi. to allocate Waste Ops for				
750		T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	616.00lHours
Factor		1	0.70239 4 to 1 adi. Factor				
750		T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	714.00lHours
Factor		1	L		1	1	
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00lHours
Factor			L				
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	350.00lHours
Factor		1.000	MICCION CUE OREO II (EL TTOLL MIC	KDOOLI	DZOZ E. W.C. MA	1	00.0011
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B/U/ Facilities Management	Linear	22.00lHours
<i>Factor</i> 751	S 22 Hours OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KD20C	B707 Facility Disposition	Linear	65.00 Hours
Factor		I IVIU IU	IFOREWEN / TEAW LEADS / GROUP	NDSUS	B/0/ Facility Disposition	Linear	65.00IHOUIS
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KBEUH	B707 Eng Envir. Sftv & Quality	Linear	175.00 Hours
Factor		1 1030	INADIATION CONTROL TECHNOLIGI	INDOUL	15/0/ Elia Elivii. Sitv & Quality	Lilleal	17 3.0011 10013
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	143.00 Hours
Factor		000	ISSUE THE THEORY TENT / THOU THE	1,50011	DIOT I COMO DIODOCIONI	Linear	1 13.0011 10013
A5C		0000	NONE	KB30S	B707 Facility Disposition	Linear	40.291.69 Dollars
Factor	s 85727 Dollars		0.47 adj. Factor				

Line Item 2CDEDBEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
7	50 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	302.00 Hours
Fac	tors 302 Hours						
7	50 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.900.00 Hours
Fac	tors 1900 Hours						
7	50 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	261.00 Hours
Fac	tors 261 Hours						
7	50 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	920.70 Hours
Fac	tors 1023 Hours		0.9 adi. to allocate Waste Ops for	oremen			

Page 14 of 145 6/22/00 9:31:11 PM OFFICIAL USE ONLY

Starts In FY *

WBS No: 1BAD02 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07B02500 Baseline Cost and Basis of Estimate 1BAD

	baseline Cost	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLI	IGI KB50H B707 Eng Envir. Sftv & Quality	Linear	1.463.00 Hours
Factors 2721 Hours	0.53767 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RE	ED KB30H B707 Facility Disposition	Linear	3.952.00 Hours
Factors 3952 Hours				
750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TE	C KB20H B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	60.00lHours
Factors 60 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	380.00lHours
Factors 380 Hours				
751 OVERTIME BASE & PRE.	L060 IMISSION SUP SPEC II (FLTTCH. V	VS KB20H B707 Facilities Management	Linear	52.00 Hours
Factors 52 Hours	T		1	
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROU	JP KB30S B707 Facility Disposition	Linear	205.00lHours
Factors 205 Hours	T ==== I= . =			
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOL	GI KB50H B707 Eng Envir. Sftv & Quality	Linear	544.00lHours
Factors 544 Hours	T = I		T	
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RE	ED KB30H B707 Facility Disposition	Linear	790.00lHours
Factors 790 Hours	2000 110115	1/D000 D707 F 3% D: 3%	1.1	74 074 70 5 11
A5C SUPPLIES	1 0000 INONE	KB30S B707 Facility Disposition	Linear	74.874.79 Dollars
Factors 265691 Dollars	0.47 adj. Factor	0.5996 adj. To remv. Waste costs		

Line Item 2CDEDBEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
15 Hours				
STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.893.00 Hours
1893 Hours				
STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, W	S KB20H B707 Facilities Management	Linear	49.00 Hours
49 Hours				
STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	110.00 Hours
110 Hours				
STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIC	KB50H B707 Eng Envir. Sftv & Quality	Linear	945.25 Hours
1874 Hours	0.5044 4 to 1 adi. Factor			
STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK REI	KB30H B707 Facility Disposition	Linear	1.888.00 Hours
1888 Hours				
OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
3 Hours				
OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	379.00 Hours
379 Hours				
OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, W	S KB20H B707 Facilities Management	Linear	10.00 Hours
10 Hours				
OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	22.00 Hours
22 Hours				
	STRAIGHT TIME BASE 15 Hours STRAIGHT TIME BASE 1893 Hours STRAIGHT TIME BASE 49 Hours STRAIGHT TIME BASE 110 Hours STRAIGHT TIME BASE 1110 Hours STRAIGHT TIME BASE 1874 Hours STRAIGHT TIME BASE 1888 Hours OVERTIME BASE & PRE. 3 Hours OVERTIME BASE & PRE. 379 Hours OVERTIME BASE & PRE. 10 Hours OVERTIME BASE & PRE. 10 Hours OVERTIME BASE & PRE.	STRAIGHT TIME BASE 15 Hours STRAIGHT TIME BASE 1893 Hours STRAIGHT TIME BASE 1893 Hours STRAIGHT TIME BASE 1994 Hours STRAIGHT TIME BASE 10060 MISSION SUP SPEC II (FLTTCH. W. M.	STRAIGHT TIME BASE 15 Hours STRAIGHT TIME BASE 15 Hours STRAIGHT TIME BASE 16 C120 D&D SKILLED TRADES 17 STRAIGHT TIME BASE 1893 Hours STRAIGHT TIME BASE 1893 Hours STRAIGHT TIME BASE 1894 Hours STRAIGHT TIME BASE 1895 Hours STRAIGHT TIME BASE 1896 M010 FOREMEN / TEAM LEADS / GROUP 1897 Facility Disposition 1898 Hours STRAIGHT TIME BASE 1898 Hours STRAIGHT TIME BASE 1899 Hours STRAIGHT TIME BASE 1890 M010 FOREMEN / TEAM LEADS / GROUP 1890 KB30S B707 Facility Disposition 1997 Facility Disposition 1998 Hours 1899 Hours 1890 HAZ REDUC TECH / RISK RED 1999 KB30H B707 Facility Disposition 1999 Hours 1999 Hours 1999 Hours 1999 Hours 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1999 Hours 1999 Hours 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1999 Hours 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1999 Hours 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1990 Hours 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 1990 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition 10 Hours 10 Hours 10 Hours	STRAIGHT TIME BASE C120 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15 Hours STRAIGHT TIME BASE C120 D&D SKILLED TRADES KB30H B707 Facility Disposition Linear 1893 Hours STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 49 Hours STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 110 Hours STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Facility Disposition Linear 1874 Hours 0.5044 4 to 1 adi. Factor STRAIGHT TIME BASE T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 1888 Hours OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 379 Hours OVERTIME BASE & PRE. C120 D&D SKILLED TRADES KB30H B707 Facility Disposition Linear 10 Hours OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 10 Hours OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 10 Hours OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facilities Management Linear 10 Hours OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 10 Hours OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 10 Hours OVERTIME BASE & PRE. M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear

Page 15 of 145 6/22/00 9:31:12 PM *OFFICIAL USE ONLY*

 WBS No:
 1BAD02
 Rocky Flats Closur

 Activity ID:
 1B07B02500
 Receive Control Position

Rocky Flats Closure Project Project Baseline Devl Baseline Cost and Basis of Estimate WBS Filter BAD

	Daseille Ci	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNO	OLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	375.00 Hours
Factors 375 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	378.00 Hours
Factors 378 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	42.156.86 Dollars
Factors 153525 Dollars	0.47 adi. Factor	0.58424 adi. To remy. Waste costs		

Line Item 2CDEDBIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 H	Hours
	Factors	15 Hours	ı		I				
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	587.00 H	Hours
r	Factors	587 Hours		T					
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	34.00 H	Hours
r	Factors	34 Hours		1					
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	138.60	Hours
ŕ	Factors	154 Hours		0.9 adi. to allocate Waste Ops for					
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	306.25	Hours
F	Factors	607 Hours	ı	0.50453 4 to 1 adi. Factor					
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	638.00 H	Hours
r	Factors	638 Hours		1					
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
ſ	Factors	3 Hours							
L		OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	117.00 H	lours
Г	Factors	117 Hours		I		I			
Ļ		OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	7.00	Hours
ſ	Factors	7 Hours			1/2000	D=0= = 1111 D1 111		24.00	
Į.	_	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	31.00	Hours
ſ	Factors	31 Hours	TOFO	DARIATION CONTROL TECHNOLOG	KDEOLL	D707 E E : 00 0 0 1"		404.00	
L	_	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	121.00	Hours
ſ	Factors 751	121 Hours	T060	D&D HAZ REDUC TECH / RISK RED	KDOOLI	B707 Facility Disposition	Usses	128.00 H	Laure
L		OVERTIME BASE & PRE. 128 Hours	1060	ID&D HAZ REDUC TECH / RISK RED	KB30H	IB/U/ Facility disposition	Linear	128.001	Hours
ſ	Factors A5C	128 Hours SUPPLIES	0000	NONE	KD20C	B707 Facility Disposition	Linear	22,405,37	Colloro
L	_	47671 Dollars	0000	0.47 adi. Factor	VD302	ID/U/ FACILITY DISDUSTRION	Lineal	ZZ.4U5.3/IL	Juliais
ſ	Factors ∧F⊔	SUBCONTRACTED SRVS	E120	OTHER ENGINEERS	KB306	B707 Facility Disposition	Linear	8.715.00	Collars
L	ПСА		L E I OU	IOTHER ENGINEERS	1/0309	IDTUT I ACIIILV DISDUSILIUTI	Lilledi	0.7 13.001	Juidis

Factors 8715 Dollars

Line Item 2CDEDBIP0 - Reduce GB In Place

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Page 16 of 145 6/22/00 9:31:12 PM *OFFICIAL USE ONLY*

 WBS No:
 1BAD02
 Rockv Fla

 Activity ID:
 1B07B02500
 Baseline Cos

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY *

Basis

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Unit Cost -

Resources

T50 STRAIGHT TIME BASE C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear T4.00 Hours
750 STRAIGHT TIME BASE C120 D&D SKILLED TRADES KB30H B707 Facility Disposition Linear 5.269.00 Hours 750 STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facility Disposition Linear 248.00 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours Factors 1939 Hours 0.9 adi. to allocate Waste Ops foremen No.9 Adi. to allocate Waste Ops foremen 750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality Linear 3.417.99 Hours Factors 5070 Hours 0.67416 4 to 1 adi. Factor KB30H B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours Hours Hours Resolution Resolution Resolution
Factors 5269 Hours 750 STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facilities Management Linear 248.00 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours 750 STRAIGHT TIME BASE 0.9 adi. to allocate Waste Ops foremen 1.745.10 Hours 3.417.99 Hours 750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality Linear 3.417.99 Hours 750 STRAIGHT TIME BASE 0.67416 4 to 1 adi. Factor 0.67416 4 to 1 adi. Factor 1.745.10 Hours 1.7
750 STRAIGHT TIME BASE L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facilities Management Linear 248.00 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours Factors 1939 Hours 0.9 adi. to allocate Waste Ops foremen B707 Eng Envir. Sftv & Quality Linear 3.417.99 Hours Factors 5070 Hours 0.67416 4 to 1 adi. Factor 4 to 1 adi. Factor B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours Hours KB10H 707 Complex Steelworkers Linear 15.00 Hours
Factors 248 Hours 750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours Factors 1939 Hours 0.9 adi. to allocate Waste Ops foremen
750 STRAIGHT TIME BASE M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 1.745.10 Hours Factors 1939 Hours 0.9 adi. to allocate Waste Ops foremen B707 End Envir. Sftv & Quality Linear 3.417.99 Hours 750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 End Envir. Sftv & Quality Linear 3.417.99 Hours Factors 5070 Hours 0.67416 4 to 1 adi. Factor 4 to 1 adi. Factor B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours Hours Hours Hours 15.00 Hours 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
Factors 1939 Hours 0.9 adi. to allocate Waste Ops foremen 750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sfty & Quality Linear 3.417.99 Hours Factors 5070 Hours 0.67416 4 to 1 adi. Factor 4 to 1 adi. Factor Linear 8.403.00 Hours Factors 8403 Hours Hours KB10H 707 Complex Steelworkers Linear 15.00 Hours
750 STRAIGHT TIME BASE T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality Linear 3.417.99 Hours Factors 5070 Hours 0.67416 4 to 1 adi. Factor KB30H B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours Hours Hours Hours Hours Linear 15.00 Hours 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
Factors 5070 Hours 0.67416 4 to 1 adi. Factor 750 STRAIGHT TIME BASE T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours Hours Linear 15.00 Hours 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
750 STRAIGHT TIME BASE T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 8.403.00 Hours Factors 8403 Hours 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
Factors 8403 Hours 751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
751 OVERTIME BASE & PRE. C020 ELECTRICIANS KB10H 707 Complex Steelworkers Linear 15.00 Hours
751 OVERTIME BASE & PRE. C120 D&D SKILLED TRADES KB30H B707 Facility Disposition Linear 1.054.00 Hours
Factors 1054 Hours
751 OVERTIME BASE & PRE. L060 MISSION SUP SPEC II (FLTTCH. WS KB20H B707 Facilities Management Linear 50.00 Hours
Factors 50 Hours
751 OVERTIME BASE & PRE. M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 388.00Hours
Factors 388 Hours
751 OVERTIME BASE & PRE. T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality Linear 1.014.00 Hours
Factors 1014 Hours
751 OVERTIME BASE & PRE. To60 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 1.681.00 Hours
Factors 1681 Hours A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition Linear 125.611.80 Dollars
Factors 629412 Dollars 0.422 adi. Factor 0.47292 adi. To remv. Waste costs
A5H SUBCONTRACTED SRVS E130 OTHER ENGINEERS KB30S B707 Facility Disposition Linear 114,701,00 Dollars
Factors 114701 Dollars

Line Item 2CDEDBPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity Units
7	50 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2,849.00 Hours
Fac	tors 2849 Hours						
7	50 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	98.00 Hours
Fac	tors 98 Hours						
7	50 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	365.40 Hours
Fac	tors 406 Hours	_	0.9 adi. to allocate Waste Ops f	oremen			
_ 7	50 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	745.50 Hours
Fac	tors 633 Hours		1.17773 4 to 1 adi. Factor				

1BAD02 Baseline Devl WBS No: Proiect **Rocky Flats Closure Project** 1B07B02500 WBS Filter 1BAD Activity ID: Resoline Cost and Resis of Estimate

		baseiiile Cost ai	iu Dasis	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T060 D&D HAZ	REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00 Hours
Factors 133 Hours						
751 OVERTIME BASE & PRE.	C120 D&D SKIL	LED TRADES	KB30H	B707 Facility Disposition	Linear	570.00 Hours
Factors 570 Hours						
751 OVERTIME BASE & PRE.	L060 MISSION	SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	20.00 Hours
Factors 20 Hours						
751 OVERTIME BASE & PRE.	M010 FOREMEN	N / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	81.00 Hours
Factors 81 Hours						
751 OVERTIME BASE & PRE.	T050 RADIATIC	N CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	127.00 Hours
Factors 127 Hours						
751 OVERTIME BASE & PRE.	T060 D&D HAZ	REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours						
A5C SUPPLIES	0000 NONE		KB30S	B707 Facility Disposition	Linear	32.190.02 Dollars
Factors 89766 Dollars	0.47	adi. Factor		0.76298 adj. To remv. Waste costs		

Line Item 2CDEDBSR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s		Cost Element		Skill		Department		Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	38.00	Hours
1	Factors	38 Hours								
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	2.855.00	Hours
1	Factors	2855 Hours								
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management		Linear	116.00	Hours
1	Factors	116 Hours								
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	798.30	Hours
1	Factors	887 Hours		0.9 adi. to allocate Waste Ops for	remen					
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	1.893.00	Hours
1	Factors	2790 Hours		0.6785 4 to 1 adi. Factor						
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	4.717.00	Hours
1	Factors	4717 Hours								
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	8.00	Hours
1	Factors	8 Hours								
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	571.00	Hours
1	Factors	571 Hours		T						
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	23.00	Hours
1	Factors	23 Hours								
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KD10H	776 Complex Steelworkers		Linear	270.00	Hours
1	Factors	2 waste inspectors		3 shifts		9 hours/shift	5	GB equivalent	S	
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project		Linear	135.00	Hours
1	Factors	1 foreman		3 shifts		9 hours/shift	5	GB equivalent	S	
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	177.00	Hours
1	Factors	177 Hours								
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	558.00	Hours
1	Factors	558 Hours								

Page 18 of 145 6/22/00 9:31:14 PM OFFICIAL USE ONLY WBS No: 1BAD02 **Rocky Flats Closure Project** Activity ID: 1B07B02500 Rasaline Cost and Rasis of Estimate

Proiect Baseline Devl 1BAD WBS Filter

	Baseline Cost ar	id Basis of Estimate	ctivity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	270.00 Hours
Factors 2 RCTs	3 shifts	9 hours/shift	5 GB equivale	nts
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	943.00 Hours
Factors 943 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.080.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	5 GB equivale	nts
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	9.375.00 Dollars
Factors 625 dollars/shift	3 shifts		5 GB equivale	nts
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	65.466.09 Dollars
Factors 352056 Dollars	0.47 adi. Factor	0.39565 adi. To remv. Waste	costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	64.184.00 Dollars
D . 04404 D-II				

Factors 64184 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	639.850.30	Dollars
	Factors	639850 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	399.871.90	Dollars

Factors 399872 Dollars

2 Schodule Risk

ACTIVITY ID: 180	Description: IVVCP Execution Trades - IVI	odule B			Cost Kisk	2 Scheaule K	ilsk 2					
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETBDC0	Decontaminate Set	1.00	each	HC	0	0	0	110.394	0	110.394	0	110.394
2CDETBDR0	Duct Removal	1.00	each	HC	0	0	0	22.345	0	22.345	0	22.345
2CDETBEA0	Electrical & Alarms	1.00	each	HC	0	0	0	193.842	0	193.842	0	193.842
2CDETBEE0	External Equipment Removal	1.00	each	HC	0	0	0	72.049	0	72.049	0	72.049
2CDETBPR0	Pipe Removal	1.00	each	HC	0	0	0	23.953	0	23.953	0	23.953
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	91.437	91.437	0	91.437
	Tot	al for Activ	ity 1B07B03	500:		0	0	422.582	91.437	514.019	0	514.019

Line Item 2CDETBDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	104.393.90	Dollars
	Factors	326231 Dollars		0.32 adi. Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars Line Item 2CDETBDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

> 6/22/00 9:31:14 PM Page 19 of 145 OFFICIAL USE ONLY

WBS No: 1BAD02 *Activity ID:* 1B07B03500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY *

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	16.345.00	Dollars
	Factors	16345 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars
	Factors	6000 dollars							

Line Item 2CDETBEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources	ces Cost Element Skill			Skill	Department	Curve	Quantity	Units
	A5B CONSTRUCTION C120 D&D SKILLED T		D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	187.841.70	Dollars	
	Factors	361234 Dollars		0.52 adi. Factor				
	A5C	SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETBEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	66,048.64	Dollars
	Factors	206402 Dollars		0.32 adj. Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6,000.00	Dollars
	Factors	6000 dollars							

Line Item 2CDETBPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

rces		Cost Element	Skill	Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	17.953.00 D	Dollars
	Factors	17953 Dollars					

WBS No: 1BAD02 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1B07B03500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate** Activity Filter

Starts In FY KB30S B707 Facility Disposition 6.000.00 Dollars A5C SUPPLIES 0000 NONE Linear

Factors 6000 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	47.146.89	Dollars
_	Factors	47146.9 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	44.289.66	Dollars

44289.7 Dollars

WBS No: 1BADO	3 Title: Decommissioning Set 3 M	odule C										
Activity ID: 1B07	CO0500 Description: IWCP Development - Modul	e C						Cost Risk	2 Schedule R	Risk 2		
Line Item	Description	Quantity Units		BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPECPL0	D&D C MODULE SET 3 PLANNING & ENGINEERING	1.00	each	НС	7.072	7.072	210.531	626.162	0	836.694	85.265	921.958
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	112.665	112.665	0	112.665
Tot			ity 1B07C00	500:		7.072	210.531	626.162	112.665	949.358	85.265	1.034.623

Line Item 2CDPECPL0 - D&D C MODULE SET 3 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	433.20 Hours
Factors	1 Engineer		1444 hours		0.3 adi Factor		
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	1.120.00 Hours
Factors	1 enaineer		1120 hours				
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	1.097.00 Hours
Factors	1 enaineer		2194 hours		0.5 adi. Factor		T
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	3.075.00 Hours
Factors	6 Engineers		2050 hours		0.25 adi. Factor		
750	STRAIGHT TIME BASE	G010		KB30S	B707 Facility Disposition	Linear	1.266.60 Hours
Factors	3 Admin Assist.		2111 hours		0.2 adi. Factor		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00lHours
Factors	2 D&D Workers (walkdowns)		40 hours				
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	279.552.20 Dollars
Factors	6 planners		2630 hours	1/2000	63.27 Dollars per hour	0.28 adi. Factor	0.00 5.11
	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
Factors	139807 dollars	F020	0 adi. Factor CIVIL ENGINEERS	KDEOC	B707 Eng Envir, Sftv & Quality	Linner	34.526.81 Dollars
A5H Factors	SUBCONTRACTED SRVS 2167 hours	E020	53 11 \$/hr	KB505	0.3 adi. Factor	Linear	34.526.811D0llars
A5H	SUBCONTRACTED SRVS	F040	ELECTRICAL ENGINEERS	KBEU6	B707 Eng Envir. Sftv & Quality	Linear	119.838.50 Dollars
Factors	1681 hours	LU40	71.29 \$/hr	NDSUS	18707 End Envir. Sitv & Quality	Lilical	119.000.00ID0IIa15
A5H	SUBCONTRACTED SRVS	F070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	119.825.30 Dollars
Factors	3291 hours	_570	72.82 \$/hr	112500	0.5 adi. Factor		110.020.00IDOIIdI3
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S		Linear	32,470.83 Dollars
Factors	1039 hours		96.16 \$/hr		0.5 adj. Factor	0.65 nuclear safet	

Page 21 of 145 6/22/00 9:31:15 PM OFFICIAL USE ONLY A5H SUBCONTRACTED SRVS E120 SAFETY ENGINEERS KB50S B707 Eng Envir. Sftv. & Quality Linear 39.948.48 Dollars

Factors 1287 hours 77.6 \$/hr 0.4 adi. Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	75.681.20	Dollars
	Factors	75681.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	36.983.51	Dollars

Factors 36983.5 Dollars

Activity ID: 1B07C02500 Description: Glovebox and equipment stripout - Modu Cost Risk 2 Schedule Risk

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
			_									
2CDEDCCV0	Remove Chainvevors to SR	1.00	each	HC	57.938	57.938	1.439.107	426.433	0	1.865.540	543.085	2.408.625
2CDEDCDC0	Decontaminate Set	1.00	each	HC	2.396	2.396	54.490	13.628	0	68.118	20.563	88.681
2CDEDCDR0	Duct Removal	1.00	each	HC	4.803	4.803	112.017	27.847	0	139.864	42.273	182.137
2CDEDCEA0	Electrical & Alarms	1.00	each	HC	11.609	11.609	272.664	50.612	0	323.276	102.897	426.173
2CDEDCEE0	External Equipment Removal	1.00	each	HC	1.151	1.151	26.694	9.152	0	35.846	10.074	45.920
2CDEDCIE0	GB Internal Equipment Removal	1.00	each	HC	4.253	4.253	99.576	48.558	0	148.134	37.578	185.711
2CDEDCIP0	Reduce GB In Place	1.00	each	HC	66.488	66.488	1.551.079	518.664	0	2.069.743	585.341	2.655.084
2CDEDCPR0	Pipe Removal	1.00	each	HC	4.270	4.270	99.258	22.186	0	121.445	37.458	158.903
2CDEDCSR0	Remove GB to Size Reduce	1.00	each	HC	19.365	19.365	482.087	170.131	0	652.218	181.928	834.146
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.001.665	1.001.665	0	1.001.665
Total for Activity 1B07C02500:						172.272	4.136.973	1.287.212	1.001.665	6.425.849	1.561.196	7.987.045

Line Item 2CDEDCCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

				T	T T
ces	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	102.00 Hours
	Factors 102 Hours				
	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	11.531.00 Hours
	Factors 11531 Hours				
	750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Management	Linear	346.00 Hours
	Factors 346 Hours				<u>, </u>
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	2.547.90 Hours
	Factors 2831 Hours	0.9 adi. to allocate Waste Ops f	oremen		<u>, </u>
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	7.245.50 Hours
	Factors 10424 Hours	0.69508 4 to 1 adi. Factor			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	17.451.00 Hours
	Factors 17451 Hours				
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	20.00 Hours
	Factors 20 Hours				
	751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	2,306.00 Hours
	Factors 2306 Hours				<u>, </u>
	751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Management	Linear	69.00 Hours
	Factors 69 Hours				

Page 22 of 145 6/22/00 9:31:17 PM *OFFICIAL USE ONLY*

Starts In FY

2

WBS No: 1BAD03 Rocky Flats Closure Project Project Baseline Devl Activity ID: 1B07C02500 Raseline Cost and Basis of Estimate WBS Filter 1BAD

Factors 2 waste inspectors 3 shifts 9 hours/shift 29 GB equivalents	00 Hours
	.du
751 OVERTIME BASE & PRE. M010 FOREMEN / TEAM LEADS / GROUP K399S Building 776 Project Linear 783.	2011
	00lHours
Factors 1 foreman 3 shifts 9 hours/shift 29 GB equivalents	
751 OVERTIME BASE & PRE. M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition Linear 566.	00 Hours
Factors 566 Hours	
751 OVERTIME BASE & PRE. T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality Linear 2.085.	00 Hours
Factors 2085 Hours	
751 OVERTIME BASE & PRE. T050 RADIATION CONTROL TECHNOLIGI KD10H 776 Complex Steelworkers Linear 1.566.	00 Hours
Factors 2 RCTs 3 shifts 9 hours/shift 29 GB equivalents	
751 OVERTIME BASE & PRE. T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 3.490.	00 Hours
Factors 3490 Hours	
751 OVERTIME BASE & PRE. T060 D&D HAZ REDUC TECH / RISK RED KD10H 776 Complex Steelworkers Linear 6.264.	00 Hours
Factors 8 D&D workers 3 shifts 9 hours/shift 29 GB equivalents	
A5C SUPPLIES 0000 NONE K399S Building 776 Project Linear 54.375.	00 Dollars
Factors 625 dollars/shift 3 shifts 29 GB equivalents	
A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition Linear 116.616.	30 Dollars
Factors 1333196 Dollars 0.26749 adi, Factor 0.32701 adi, To remv. Waste costs	
A5H SUBCONTRACTED SRVS E130 OTHER ENGINEERS KB30S B707 Facility Disposition Linear 255.441.	00 Dollars

Factors 255441 Dollars

Line Item 2CDEDCDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity Uni
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00 Hours
Factors	32 Hours						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
Factors	118 Hours		1				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	382.50 Hours
Factors	275 Hours		1.39091 4 to 1 adi. Factor		1		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.498.00 Hours
Factors	1498 Hours		T		1		
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00 Hours
Factors	6 Hours		T				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00 Hours
Factors	4 Hours		1		T		
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours
Factors	55 Hours		1		T		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	300.00 Hours
Factors	300 Hours		1		T		
A5C		0000	NONE	KB30S	B707 Facility Disposition	Linear	13.627.97 Dollar
Factors	46993 Dollars		0.29 adj. Factor				

Line Item 2CDEDCDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Page 23 of 145 6/22/00 9:31:18 PM *OFFICIAL USE ONLY*

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1BAD

Starts In FY *

Item Desc - Similar B771 and B779 Activity
Breakdown of Historical Data:
Item - See Line Item Title
Units - 1 lot
Unit Cost Unit Cost Adjustment factor Revised Unit Cost Basis for adjustment -

Resources

WBS No:

Activity ID:

1BAD03

1B07C02500

es		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
نے	Factors	15 Hours						
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.031.00 Hours
d	Factors	2031 Hours						
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	110.00 Hours
ŕ	Factors	110 Hours		1				
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	329.40 Hours
ŕ	Factors	366 Hours		0.9 adi. to allocate Waste Ops for	oremen			
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	699.25 Hours
ŕ	Factors	975 Hours		0.71718 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	766.00 Hours
ŕ	Factors	766 Hours		T				
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00Hours
ď	Factors	3 Hours		1				
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	406.00 Hours
ď	Factors	406 Hours		1				
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	22.00 Hours
ď	Factors	22 Hours		1				
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	73.00 Hours
ď	Factors	73 Hours		1				
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	195.00 Hours
ď	Factors	195 Hours		1				
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	153.00lHours
ď	Factors	153 Hours		1				
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	27.847.25 Dollars
	Factors	96025 Dollars		0.29 adj. Factor				

Line Item 2CDEDCEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

s		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	392.00 Hours
	Factors	392 Hours						
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.985.00 Hours
	Factors	1985 Hours						
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	295.00 Hours
	Factors	295 Hours						

 WBS No:
 1BAD03
 Rocky Flats Closure Project
 Project

 Activity ID:
 1B07C02500
 Baseline Cost and Basis of Estimate
 WBS Filter

	Baselille Cost all	Activity Filter *		Starts In FY *
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	963.90 Hours
Factors 1071 Hours	0.9 adi. to allocate Waste Ops for	oremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	1.544.75 Hours
Factors 2779 Hours	0.55587 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	4.194.00 Hours
Factors 4194 Hours				
750 STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TEC	KB20H B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	79.00 Hours
Factors 79 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	397.00 Hours
Factors 397 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	59.00 Hours
Factors 59 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	214.00 Hours
Factors 214 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	556.00 Hours
Factors 556 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	839.00 Hours
Factors 839 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	50.611.93 Dollars
Factors 277972 Dollars	0.29 adj. Factor	0.62785 adj. To remv. Waste costs		

Line Item 2CDEDCEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
نے	Factors	15 Hours			,				
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	337.00	Hours
ď	Factors	337 Hours		T		T		ı	
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	7.00	Hours
r	Factors	7 Hours		T		T			
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	40.00	Hours
ď	Factors	40 Hours		T		T T			
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	174.75	Hours
ŕ	Factors	319 Hours		0.54781 4 to 1 adi. Factor				1 1	
L	750	STRAIGHT TIME BASE	T060	ID&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	362.00	Hours
ď	Factors	362 Hours		T					
L	751	OVERTIME BASE & PRE.	C020	IELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
ŕ	Factors	3 Hours							
L	751	OVERTIME BASE & PRE.	C120	ID&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	67.00	Hours
ŕ	Factors	67 Hours							
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	1.00	Hours
4	Factors	1 Hours							

Page 25 of 145 6/22/00 9:31:19 PM *OFFICIAL USE ONLY*

Baseline Devl

1BAD

WBS No: 1BAD03 Rocky Flats Closure Project Project Baseline Devl Activity ID: 1B07C02500 Raseline Cost and Basis of Estimate WBS Filter 1BAD

		Daseille Cost all	u Dasis	Activity Filte	, *	Starts In FY *
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	8.00 Hours
Factors 8 Hours						
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	64.00 Hours
Factors 64 Hours						
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	72.00 Hours
Factors 72 Hours						
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	9.152.40 Dollars
Factors 31560 Dollars		0.29 adj. Factor				

Factors 31560 Dollars Line Item 2CDEDCIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
1	Factors	15 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.199.00	Hours
1	Factors	1199 Hours		1		1			
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	71.00	Hours
1	Factors	71 Hours		T		T			
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	257.40	Hours
1	Factors	286 Hours		0.9 adi. to allocate Waste Ops for					
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	618.75	Hours
1	Factors	1237 Hours		0.50020 4 to 1 adi. Factor					
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.276.00	Hours
1	Factors	1276 Hours		1					
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
1	Factors	3 Hours						1	
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	240.00	Hours
1	Factors	240 Hours							
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	14.00	Hours
1	Factors	14 Hours				T			
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	57.00	Hours
1	Factors	57 Hours		DARLETON CONTROL TECHNICAGE	1/5=011	D=0= E		0.17.00	
L	751	OVERTIME BASE & PRE.	1050	RADIATION CONTROL TECHNOLIGI	KB50H	B/0/ Eng Envir. Sftv & Quality	Linear	247.00	Hours
4	Factors	247 Hours	T000	DAD HAZ DEDI IO TEOU / DIOK DED	I/Dool I	D707 F 39 D1 39	1	255.00	
L	751	OVERTIME BASE & PRE.	1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	255.00	Hours
- 1	Factors	255 Hours SUPPLIES	0000	NONE	KDOOC	DZOZ Eilit. Diiti	Linner	00 700 05	D-II
L,	A5C		0000		KB305	B707 Facility Disposition	Linear	26.780.05	Dollars
- [Factors	92345 Dollars	E420	0.29 adi. Factor	KBanc	B707 Facility Disposition	Lincor	21.778.00	Dellara
L	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	VD302	ID/U/ Facility Disposition	Linear	21.778.00	Dollars
I	Factors	21778 Dollars							

Line Item 2CDEDCIP0 - Reduce GB In Place

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

WBS No: 1BAD03 **Rocky Flats Closure Project** 1B07C02500 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1BAD Activity Filter

Starts In FY *

Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	145.00 Hours
F	actors	145 Hours		_	,			
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	16.058.00 Hours
F	Factors 7	16058 Hours		T				T T
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	618.00 Hours
F	Factors 7	618 Hours		1				
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	4.498.20 Hours
F	actors	4998 Hours		0.9 adi. to allocate Waste Ops for		D=0= E		0.000.00
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B/0/ Eng Envir. Sttv & Quality	Linear	9.836.25lHours
F	750	15115 Hours STRAIGHT TIME BASE	TOCO	0.65076 4 to 1 adi. Factor D&D HAZ REDUC TECH / RISK RED	KD20LL	B707 Facility Disposition	Linear	23.287.00 Hours
Ľ	750 Factors	23287 Hours	1060	ID&D HAZ REDUC TECH / RISK RED	KBSUH	B707 Facility Disposition	Linear	23.287.00Inouis
ľ	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	29.00 Hours
F	Factors	29 Hours	0020	TEECO TIMON MO	IND IVII	TOT COMBIEX CICCIWOTICIS	Lincal	25.00110013
Ĺ	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	3.212.00 Hours
F	Factors .	3212 Hours						
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	124.00 Hours
F	Factors.	124 Hours			1		1	T
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	1.000.00 Hours
F	Factors	1000 Hours		1				
L			T050	IRADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	3.023.00lHours
F			T		1/20011	D=0= E W. D. W.		4 000 0011
			1060	ID&D HAZ REDUC TECH / RISK RED	KB30H	B/0/ Facility Disposition	Linear	4.658.00IHours
			0000	NONE	KBane	P707 Facility Disposition	Lincor	154 000 00 Dollaro
			0000	··-·-	NDSUS	•	Lilledi	134.303.30[D0llatS
			F130		KB30S		Linear	363 754 00 Dollars
,			_100	IN THE CONTRACTOR	1,0000	prori domy proposition	Lilloui	
F F F	751 Factors 751 Factors 751	OVERTIME BASE & PRE. 3212 Hours OVERTIME BASE & PRE. 124 Hours OVERTIME BASE & PRE.	L060 M010 T050 T060	MISSION SUP SPEC II (FLTTCH. WS	KB20H KB30S KB50H KB30H	B707 Facilities Management	Linear	124.00 Hours

Line Item 2CDEDCPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES K		KB30H	B707 Facility Disposition	Linear	2.404.00	Hours
	Factors	2404 Hours							
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	83.00	Hours
	Factors	83 Hours							
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	312.30	Hours
	Factors	347 Hours		0.9 adi, to allocate Waste Ops for	oremen				

Page 27 of 145 6/22/00 9:31:20 PM OFFICIAL USE ONLY

WBS No: 1BAD03 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07C02500 WBS Filter 1BAD Activity ID: Raseline Cost and Rasis of Estimate

	Baseline Cost and Ba	SIS Of Estimate Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI KB5	0H B707 Eng Envir, Sftv & Quality	Linear	634.25 Hours
Factors 544 Hours	1.16590 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED KB3	0H B707 Facility Disposition	Linear	133.00 Hours
Factors 133 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES KB3	0H B707 Facility Disposition	Linear	481.00 Hours
Factors 481 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS KB2	0H B707 Facilities Management	Linear	17.00 Hours
Factors 17 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP KB3	0S B707 Facility Disposition	Linear	69.00 Hours
Factors 69 Hours				T 1
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI KB5	0H B707 Eng Envir. Sftv & Qualitv	Linear	109.00 Hours
Factors 109 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED KB3	0H B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours				
A5C SUPPLIES	0000 NONE KB3	0S B707 Facility Disposition	Linear	22.186.45 Dollars
Factors 76505 Dollars	0.29 adj. Factor			

Line Item 2CDEDCSR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element	Skill			Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	71.00	Hours
Factors	71 Hours								
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	4.475.00	Hours
Factors	4475 Hours		T						
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	199.00	Hours
Factors	199 Hours		T						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	1.294.20	Hours
Factors	1438 Hours		0.9 adi. to allocate Waste Ops for	oremen					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	2.347.75	Hours
Factors	3416 Hours		0.68728 4 to 1 adi. Factor						
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	4.916.00	Hours
Factors	4916 Hours		T						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	14.00	Hours
Factors	14 Hours		T						
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	895.00	Hours
Factors	895 Hours		T						
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	40.00	Hours
Factors	40 Hours		T						
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KD10H	776 Complex Steelworkers		Linear	486.00	Hours
Factors	2 waste inspectors		3 shifts		9 hours/shift	9	GB equivalents		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project		Linear	243.00	Hours
Factors	1 foreman		3 shifts		9 hours/shift	9	GB equivalents		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	288.00	Hours
Factors	288 Hours								

Page 28 of 145 6/22/00 9:31:21 PM OFFICIAL USE ONLY WBS No: 1BAD03 Activity ID: 1B07C02500

Rocky Flats Closure Project

Proiect WBS Filter

Baseline Devl 1BAD

	Baseline Cost an	d Basis of Estimate Activity Filter	* Sta	rts In FY *
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	683.00 Hours
Factors 683 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KD10H 776 Complex Steelworkers	Linear	486.00 Hours
Factors 2 RCTs	3 shifts	9 hours/shift	9 GB equivalents	
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	983.00 Hours
Factors 983 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.944.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	9 GB equivalents	
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear 1	6.875.00 Dollars
Factors 625 dollars/shift	3 shifts		9 GB equivalents	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear 5	7.348.88 Dollars
Factors 439134 Dollars	0.29 adi. Factor	0.45033 adi. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear 9	5.907.00 Dollars

95907 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	679.992.70	Dollars
Factors	679993 Dollars							
ESC	ESCALATION	0000	NONE	7DFPT	No Department	Linear	321 672 20	Dollars

Factors 321672 Dollars

Activity ID: 1B07C03500

Description: IWCP Execution Trades - Module C

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETCDC0	Decontaminate Set	1.00 €	each	HC	0	0	0	133.230	0	133.230	0	133.230
2CDETCDR0	Duct Removal	1.00 €	each	HC	0	0	0	24.405	0	24.405	0	24.405
2CDETCEA0	Electrical & Alarms	1.00 €	each	HC	0	0	0	229.130	0	229.130	0	229.130
2CDETCEE0	External Equipment Removal	1.00 €	each	HC	0	0	0	19.320	0	19.320	0	19.320
2CDETCPR0	Pipe Removal	1.00 €	each	HC	0	0	0	21.301	0	21.301	0	21.301
SYS	Contingency And Escalation	1.00 €	ea	EE	0	0	0	0	107.634	107.634	0	107.634
	Tot	al for Activity	/ 1B07C0350	00:		0	0	427.386	107.634	535.021	0	535.021

Line Item 2CDETCDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element	Skill				Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	127.230.10	Dollars
	Factors	326231 Dollars		0.39	adi. Factor					
Į	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

6000 Factors dollars

Line Item 2CDETCDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY

Item - See Line Item Title
Units - 1 lot
Unit Cost Unit Cost Adjustment factor Revised Unit Cost Basis for adjustment -

Resources

WBS No:

Activity ID:

1BAD03

1B07C03500

es		Cost Element	Skill	Department	Curve	Quantity Units
	A5B	CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	18.405.00 Dollars
	Factors	18405 Dollars				
	A5C	SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	6.000.00 Dollars
	Factors	6000 dollars				

Line Item 2CDETCEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	223.130.30	Dollars
	Factors	378187 Dollars		0.59 adi. Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars
	Factors	6000 dollars							

Line Item 2CDETCEE0 - External Equipment Removal

ROF

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

ces	Cost Element	Skill	Department	Curve	Quantity Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proj B Estimating Only	Linear	13.320.06 Dollars
	Factors 34154 Dollars	0.39 adi. Factor			
	A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	6.000.00 Dollars
	Factors 6000 dollars				

Line Item 2CDETCPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:
Item - See Line Item Title
Units - 1 lot
Unit Cost Unit Cost Adjustment factor Revised Unit Cost Basis for adjustment -

Page 30 of 145 6/22/00 9:31:22 PM *OFFICIAL USE ONLY*

WBS No: 1BAD03 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07C03500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate** Activity Filter

Resources

es		Cost Element	Skill			Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	15.301.00 Do	ollars
	Factors	15301 Dollars			•				
		SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00 Do	ollars
	Factors	6000 dollars							

Line Item SYS - Contingency And Escalation

BOE

Resource

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE Z	DEPT I	No Department	Linear	74.490.31	Dollars
	Factors	74490.3 Dollars							
	ESC	ESCALATION	0000	NONE Z	DEPT I	No Department	Linear	33.144.18	Dollars

33144.2 Dollars

WBS No: 1BAD	<u>104 Title: Decommissioning Set 4 March 104 Title: Decomm</u>	lodule D										
Activity ID: 1B07	7D00500 Description: IWCP Development - Mode	ıle D						Cost Risk	2 Schedule R	risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEDPL0	D&D D MODULE SET 4 PLANNING & ENGINEERING	1.00	each	HC	3.610	3.610	107.103	376.549	0	483.652	44.937	528.589
SYS Contingency And Escalation		1.00 ea		EE	0	0	0	0	49.837	49.837	0	49.837
	To	otal for Activi	ty 1B07D005	500:		3.610	107.103	376.549	49.837	533.488	44.937	578.425

Line Item 2CDPEDPL0 - D&D D MODULE SET 4 PLANNING & ENGINEERING

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	218.70	Hours
F_{ϵ}	actors	1 Engineer		729 hours		0.3 adj Factor			
	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	566.00	Hours
Fe	actors	1 engineer		566 hours					
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	554.00	Hours
F_{ϵ}	actors	1 engineer		1108 hours		0.5 adj. Factor			
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1,552.00	Hours
F_{ℓ}	actors	4 Engineers		1552 hours		0.25 adj. Factor			
	750	STRAIGHT TIME BASE	G010		KB30S	B707 Facility Disposition	Linear	639.20	Hours
F_{ℓ}	actors	 Admin Assist. 	į.	1598 hours		0.2 adi. Factor			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
F_{ℓ}	actors	2 D&D Workers (walkdowns)		40 hours		T-			
	A52	TENERA	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	120.954.00	Dollars
	actors	1661 hours		72.82 \$/hr		T-			
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	141.157.90	Dollars
F_{ℓ}	actors	6 planners		1328 hours		63.27 Dollars per hour	0.28 adi. Factor		
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
	actors	70565 dollars		0 adi. Factor		T-			
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	17.430.70	Dollars
F_{ϵ}	actors	1094 hours	į.	53.11 \$/hr		0.3 adi. Factor			
	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	60.453.92	Dollars
Fe	actors	848 hours		71.29 \$/hr					

Page 31 of 145 6/22/00 9:31:22 PM OFFICIAL USE ONLY

Starts In FY

WBS No: 1BAD04 Rocky Flats Closure Project
Activity ID: 1B07D00500 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD

2 Schedule Risk

			Baconiio Goot an	u Duo.0	Activity	Filter *	Starts In FY *
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	16.376.05 Dollars
Factor	524 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear	safety eng.
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	20.176.00 Dollars
Factor	650 hours		77.6 \$/hr		0.4 adi. Factor		
	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
Factor	497519 Powertool balance adj.		0 adj factor for 11.9 % reduction	on			

racios 497319 Fowerton balance aug.

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	32.932.42	Dollars
F	actors	32932.4 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16.904.32	Dollars

Factors 16904.3 Dollars

Activity ID: 1B07D02500 Description: Glovebox and equipment stripout - Modu Cost Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDDCV0	Remove Chainvevors to SR	1.00	each	HC	30.901	30.901	717.260	393.572	0	1.110.832	285.013	1.395.845
2CDEDDDC0	Decontaminate Set	1.00	each	HC	2.396	2.396	54.490	27.256	0	81.746	21.652	103.398
2CDEDDDR0	Duct Removal	1.00	each	HC	6.935	6.935	161.352	77.619	0	238.971	64.115	303.086
2CDEDDEA0	Electrical & Alarms	1.00	each	HC	8.281	8.281	194.025	71.396	0	265.421	77.098	342.520
2CDEDDEE0	External Equipment Removal	1.00	each	HC	5.054	5.054	116.889	64.525	0	181.414	46.447	227.861
2CDEDDIE0	GB Internal Equipment Removal	1.00	each	HC	1.844	1.844	43.307	31.892	0	75.199	17.209	92.408
2CDEDDIP0	Reduce GB In Place	1.00	each	HC	13.260	13.260	310.715	186.636	0	497.351	123.467	620.818
2CDEDDPR0	Pipe Removal	1.00	each	HC	3.648	3.648	84.812	37.988	0	122.799	33.701	156.500
2CDEDDSR0	Remove GB to Size Reduce	1.00	each	HC	10.655	10.655	249.129	169.545	0	418.674	98.995	517.669
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	416.085	416.085	0	416.085
	Tot	al for Activi	v 1B07D02	500:		82.972	1.931.978	1.060.429	416.085	3.408.493	767.698	4.176.191

Line Item 2CDEDDCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

		-						
es		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	82.00 Hours
	Factors	82 Hours			,			
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.765.00 Hours
1	Factors	6765 Hours			I			
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	259.00 Hours
í	Factors	259 Hours			I			
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	1.759.50 Hours
1	Factors	1955 Hours		0.9 adi. to allocate Waste Ops for	oremen			
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	4.656.00 Hours
1	Factors	6683 Hours		0.69669 4 to 1 adi. Factor	I			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	11,859.00 Hours
ú	Factors	11859 Hours			I			
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	16.00 Hours
	Factors	16 Hours						

Page 32 of 145 6/22/00 9:31:24 PM *OFFICIAL USE ONLY*

WBS No: 1BAD04 Rocky Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07D02500 Reseline Cost and Basis of Estimate WBS Filter 1BAD

	Baseline Cost a	nd Basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.353.00 Hours
Factors 1353 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Manageme	nt Linear	52.00 Hours
Factors 52 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	391.00 Hours
Factors 391 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Ena Envir. Sftv & Qu	ality Linear	1.337.00 Hours
Factors 1337 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	2.372.00 Hours
Factors 2372 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	243.891.90 Dollars
Factors 860163 Dollars	0.54512 adi Factor	0.52015 adi. To remv. W	aste costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	149.680.00 Dollars

Factors 149680 Dollars

Line Item 2CDEDDDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

ces		Cost Element Skill			Department	Curve	Ouantity Units	
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00 Hours
r	Factors	32 Hours			I			
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
r	Factors	118 Hours		1		T		
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	382.50 Hours
Г	Factors	275 Hours		1.39091 4 to 1 adi. Factor	I	T T		
Ļ	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.498.00 Hours
ſ	Factors	1498 Hours		1		1		<u> </u>
Ļ	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00 Hours
Г	Factors	6 Hours						
Ļ	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00 Hours
Г	Factors	4 Hours				[
Ļ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	55.00 Hours
Г	Factors	55 Hours		L		I		
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	300.00 Hours
Г	Factors	300 Hours		I		I		
L	_A5C	SUPPLIES	0000	INONE	KB30S	B707 Facility Disposition	Linear	27.255.94 Dollars
	Factors	46993 Dollars		0.58 adi Factor				

Line Item 2CDEDDDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Page 33 of 145 6/22/00 9:31:24 PM *OFFICIAL USE ONLY*

WBS No: 1BAD04Activity ID: 1B07D02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1BAD

Starts In FY

Resources

		ACTIVITY FILLEY	•	Starts in F i
Basis for adjustment -				
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
actors 15 Hours				
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	3.173.00 Hours
actors 3173 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTC	CH. WS KB20H B707 Facilities Management	Linear	230.00 Hours
actors 230 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN/TEAM LEADS/GI	ROUP KB30S B707 Facility Disposition	Linear	480.60 Hours
actors 534 Hours	0.9 adi. to allocate Was			
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHN	NOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	1.001.50 Hours
actors 1220 Hours	0.82090 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISI	K RED KB30H B707 Facility Disposition	Linear	833.00lHours
actors 833 Hours	T L	T.,		1
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
actors 3 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	635.00 Hours
actors 635 Hours		211 1412 1/2 211 D=2= E 1111 14		40.00
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTC	CH. WS KB20H B707 Facilities Management	Linear	46.00 Hours
751 OVERTIME BASE & PRE	M010 FOREMEN / TEAM LEADS / GI	ROUP KB30S B707 Facility Disposition	Linear	107.00 Hours
	I MUTU IFOREMEN / TEAM LEADS / GI	ROUP KB3US B7U/ Facility Disposition	Linear	TU7.UUIHOUIS
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHN	NOLIGI KB50H B707 Eng Envir, Sftv & Quality	Linear	244.00 Hours
actors 244 Hours	I 1030 INADIATION CONTROL TECH	NOCIOI NOSOTI D707 ETIU ETIVII. SILV & QUAIILV	LIIICAI	244.00 I 100 S
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISI	K RED KB30H B707 Facility Disposition	Linear	167.00 Hours
actors 167 Hours	1 1000 IDGD 11/12 NEDOC TECHT/ NIOI	TARE TOO DIO TOO DOUGHOU	Lilleai	107.00 110013
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	77.619.08 Dollars
actors 133826 Dollars	0.58 adi Factor	THE OUT OF THE PROPERTY OF THE	Lilloui	
	0.00 44, 40.01			

Line Item 2CDEDDEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

Cost Element Skill			Department	Curve	Ouantity Units		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	411.00 Hours
Factors	411 Hours						
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.435.00 Hours
Factors	1435 Hours						
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	259.00 Hours
Factors	259 Hours						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	663.30 Hours
Factors	737 Hours		0.9 adi. to allocate Waste Ops for	oremen			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	1.072.25 Hours
Factors	1786 Hours		0.60036 4 to 1 adi. Factor				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.854.00 Hours
Factors	2854 Hours						

WBS No: 1BAD04 Proiect **Rocky Flats Closure Project** Activity ID: 1B07D02500 WBS Filter Rasaline Cost and Rasis of Estimate

		Baseline Cost an	nd Basis	of Estimate	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	KB20H	B707 Facilities Management		Linear	90.00 Hours
Factors 90 Hours							
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	82.00 Hours
Factors 82 Hours							
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	287.00 Hours
Factors 287 Hours				1			
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	52.00 Hours
Factors 52 Hours				1		1	
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	147.00 Hours
Factors 147 Hours	1		1				
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quali	tv	Linear	357.00 Hours
Factors 357 Hours	1		1				
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	571.00 Hours
Factors 571 Hours				1		1	
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition		Linear	71.396.38 Dollars
Factors 192063 Dollars		0.58 adi Factor		0.64092 adi. To remv. Was	te costs		

Line Item 2CDEDDEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

Ба	bib for adjubement	Tot adjustment						
s	Cost Element		Skill		Department	Curve	Quantity	Units
75	50 STRAIGHT TIME BASE	C020 EL	LECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
Fact	ors 15 Hours	, ,			T.	T.		
7:	50 STRAIGHT TIME BASE	C120 D8	&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.576.00	Hours
Faci	ors 1576 Hours	1			Т			
7	50 STRAIGHT TIME BASE	L060 MI	ISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	41.00	Hours
Faci					1	T		
7:		M010 FC	OREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	95.00	Hours
Fact		1						
7			ADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	786.50	Hours
Faci		1	0.50546 4 to 1 adi. Factor		T			
7:		T060 ID8	&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.570.00	Hours
Faci								
7:		I C020 IEL	LECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
Faci		0400 00	0.D. 0.K.I. I. E.D. T.D. 4.D.E.0	KDOOLI	D707 F 39 D1 39	1.	045.00	
7:		I C120 ID8	&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	315.00	Hours
Fact 7!	110010	1.000 MI	ISSION SUP SPEC II (FLTTCH. WS	KDOOLI	DZOZ Facilities Management	Linear	0.00	Hours
Faci		I LUGU IIVII	ISSION SUP SPEC II (FLTTCH, WS	ND2UH	16707 Facilities Management	Linear	8.00	nouis
7!		M010 EC	OREMEN / TEAM LEADS / GROUP	KB306	B707 Facility Disposition	Linear	10.00	Hours
Faci		I WOTO II C	OKLINEN / TEAM LEADS / OKOO!	NDSUS	IDTOT I ACIII V DISDOSILIOI	Lilleai	19.00	illouis
7:		T050 R/	ADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir Sftv & Quality	Linear	311.00	Hours
Faci		. 1000 110			DE OF BUILD BUILD SHEET OF SEMANTY	Linoai	0.11.00	
7:		T060 D8	&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	314.00	Hours
Faci								

Page 35 of 145 6/22/00 9:31:26 PM OFFICIAL USE ONLY

Baseline Devl

1BAD

WBS No: 1BAD04 Activity ID: 1B07D02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

Activity Filter * Starts In FY *

KB30S B707 Facility Disposition Linear 64.525.32 Dollars

Factors 128492 Dollars 0.58 adi Factor 0.86582 adi. To remv. Waste costs

0000 NONE

Line Item 2CDEDDIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

A5C SUPPLIES

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element	Skill		Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Cor	mplex Steelworkers	Linear	15.00 Hours
į	Factors 15 Hours					
L	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Fa	acility Disposition	Linear	505.00 Hours
į	Factors 505 Hours					
L	750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. W	S KB20H B707 Fa	acilities Management	Linear	26.00 Hours
ř	Factors 26 Hours					
L	750 STRAIGHT TIME BASE	M010 IFOREMEN / TEAM LEADS / GROUP		acility Disposition	Linear	128.70 Hours
ď	Factors 143 Hours	0.9 adi. to allocate Waste Op				
L	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIC	I KB50H B707 Er	ng Envir. Sftv & Qualitv	Linear	264.25 Hours
ď	Factors 525 Hours	0.50333 4 to 1 adi. Factor				
L	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK REI	KB30H B707 Fa	acility Disposition	Linear	552.00 Hours
ď	Factors 552 Hours	OCCO ELECTRICIANO	1/D4011 707.0	1 0: 1	1	0.0011
L	751 OVERTIME BASE & PRE. Factors 3 Hours	C020 ELECTRICIANS	KB10H 1/0/ Cor	nplex Steelworkers	Linear	3.00lHours
ď	Factors 3 Hours 751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Fa	polity Diaposition	Linear	101.00 Hours
L	Factors 101 Hours	C120 ID&D SKILLED I RADES	KBSUN BIUI F	acility Disposition	Lilledi	101.00iHodis
ĺ	751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, W	S KB20H B707 F2	acilities Management	Linear	5.00 Hours
_	Factors 5 Hours	T EXAM INTO CONTROL OF EXPERIENCE OF EXPERIE	J I KOZWII IBIWI I	AMIRICA IVITATIRANA INA IL	Lincol	ZAZII IZAI
ſ	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Fa	acility Disposition	Linear	29.00 Hours
	Factors 29 Hours	•			·	-
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIC	I KB50H B707 Er	ng Envir. Sftv & Qualitv	Linear	105.00 Hours
į	Factors 105 Hours					
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK REI	KB30H B707 Fa	acility Disposition	Linear	110.00 Hours
Ĺ	Factors 110 Hours					
L	A5C SUPPLIES	0000 NONE	KB30S B707 Fa	acility Disposition	Linear	24.321.14 Dollars
Á	Factors 41933 Dollars	0.58 adi Factor				
L	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Fa	acility Disposition	Linear	7.571.00 Dollars
1	Factors 7571 Dollars					

Line Item 2CDEDDIP0 - Reduce GB In Place

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources Cost Element Skill Department Curve Quantity Units

WBS No: 1BAD04 Activity ID: 1B07D02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

1BAD

		Baseline Cost an	a Basis	Or Estimate Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	39.00 Hours
Factors 39 Hours						
750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	3.263.00 Hours
Factors 3263 Hours	1			T		
750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	149.00 Hours
Factors 149 Hours				Т		
750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	1.036.80 Hours
Factors 1152 Hours	1	0.9 adi. to allocate Waste Ops for		T		
750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.920.75 Hours
Factors 3131 Hours	1	0.61346 4 to 1 adi. Factor		1		1
750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	4.420.00 Hours
Factors 4420 Hours						
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.00 Hours
Factors 8 Hours	I	L				
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	653.00 Hours
Factors 653 Hours	1,000	MICCION OUR ORFO II /FI TTOU MIC	KDOOLI	DZOZ E WY MA		20.0011
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B/0/ Facilities Management	Linear	30.00 Hours
751 OVERTIME BASE & PRE.	14040	FOREMEN / TEAM LEADS / GROUP	KDOOC	B707 Facility Disposition	Linna	230.00 Hours
751 OVERTIME BASE & PRE.	I MOTO	IFOREMEN / TEAM LEADS / GROUP	KB305	IB/U/ Facility Disposition	Linear	230.00IH0urs
751 OVERTIME BASE & PRE.	TOFO	RADIATION CONTROL TECHNOLIGI	KDEUL	P707 Eng Envir Office Ouglity	Linear	626.00 Hours
Factors 626 Hours	1 1030	IRADIATION CONTROL TECHNOLIGI	KBSUH	18707 End Envir. Sitv & Quality	Lilleai	626.00IHOUIS
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	884.00 Hours
Factors 884 Hours	1000	IDAD TIVE REDOC TECHT MONNED	RESOLL	DIOT I delitty Disposition	Linoui	004.00 10013
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	119.695.30 Dollars
Factors 361544 Dollars		0.58 adi Factor		0.57081 adj. To remv. Waste costs	203.	
A5H SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	66.941.00 Dollars
Factors 66941 Dollars						

Line Item 2CDEDDPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Breakdown of Historical Data: | Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.034.00 Hours
Factors	2034 Hours						, , , , , , , , , , , , , , , , , , ,
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	71.00 Hours
Factors	71 Hours						, , , , , , , , , , , , , , , , , , ,
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	267.30 Hours
Factors	297 Hours		0.9 adi. to allocate Waste Ops for	oremen			<u> </u>
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	541.75 Hours
Factors	470 Hours		1.15266 4 to 1 adi. Factor				, , , , , , , , , , , , , , , , , , ,
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00 Hours
Factors	133 Hours						· · · · · · · · · · · · · · · · · · ·
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	407.00 Hours
Factors	407 Hours						

Page 37 of 145 6/22/00 9:31:27 PM *OFFICIAL USE ONLY*

WBS No: 1BAD04 1B07D02500 Activity ID:

Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

	*	Starts In FY *			
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	14.00 Hours
Factors 14 Hours					
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	59.00 Hours
Factors 59 Hours	_				
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	94.00 Hours
Factors 94 Hours	_				
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours	_				
A5C SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	37.987.68 Dollars
Factors 65406 Dollars		0.59 adi Eactor			

Factors 65496 Dollars adi Factor

Line Item 2CDEDDSR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
7	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	50.00 Hours
Fac	ictors	50 Hours						
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.739.00 Hours
Fac	ictors	2739 Hours		,				
7	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	130.00 Hours
Fac	ictors	130 Hours						
L 7	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	826.20 Hours
	ictors	918 Hours		0.9 adi. to allocate Waste Ops for				
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.547.50 Hours
	ctors	2263 Hours		0.68383 4 to 1 adi. Factor	1/20011	D=0= F D1		0 454 0014
	750	STRAIGHT TIME BASE	1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	3.451.00 Hours
	<i>ictors</i> 751	3451 Hours	C020	ELECTRICIANS	KD40LL	707 Complex Steelworkers	Linna	10.00 Hours
		OVERTIME BASE & PRE. 10 Hours	C020	IELEC I RICIANS	KBIUH	707 Complex Steelworkers	Linear	10.00[Hours
	<i>ictors</i> 751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	548.00 Hours
	ictors	548 Hours	C120	ID&D SKILLED TRADES	NDSULL	BTOT I ACHIEV DISDOSITION	Lilleal	348.00 i louis
	751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	26.00 Hours
	ictors	26 Hours	LOOU		TO LOTT	DI OTT GOIMOO WATAGOTTOTI	Eliloui	20.00110010
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	184.00 Hours
Fac	ictors	184 Hours						
7	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	453.00 Hours
Fac	ictors	453 Hours						
7	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	690.00 Hours
Fac	ictors	690 Hours				1		
P	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	116.424.70 Dollars
	ictors	286939 Dollars		0.58 adi Factor		0.69956 adi. To remv. Waste costs		<u> </u>
P	A5H_	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	53.120.00 Dollars

Factors 53120 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Flamont	Skill	Danastmant	Cumia	Quantity	Hinita
resources	Cost Etement	Skill	Department	Curve	Quantity	Units

Page 38 of 145 6/22/00 9:31:27 PM OFFICIAL USE ONLY WBS No: 1BAD04 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07D02500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

Factors 139722 Dollars

Activity ID: 1B07D03500 Description: IWCP Execution Trades - Module D Cost Risk 2 Schedule Risk 2

ACCIVILY ID. I DO	Description. IN C. Lecture A.S. E. Schedule Hadde													
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost		
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost				
2CDETDDC0	Decontaminate Set	1.00	each	HC	0	0	0	129.968	0	129.968	0	129.968		
2CDETDDR0	Duct Removal	1.00	each	HC	0	0	0	31.965	0	31.965	0	31.965		
2CDETDEA0	Electrical & Alarms	1.00	each	HC	0	0	0	156.567	0	156.567	0	156.567		
2CDETDEE0	External Equipment Removal	1.00	each	HC	0	0	0	71.302	0	71.302	0	71.302		
2CDETDPR0	Pipe Removal	1.00	each	HC	0	0	0	19.099	0	19.099	0	19.099		
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	114.501	114.501	0	114.501		
	То	tal for Activi	tv 1B07D035	500:		0	0	408.901	114.501	523.402	0	523,402		

Line Item 2CDETDDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element Skill			Department	С	urve	Quantity	Units			
	A5B	CONSTRUCTION	C120	D&D SKILL	ED TRADES	KB20C	Building Trades Proi B Estimating Only	Li	near	123.967.80	Dollars
_	Factors	326231 Dollars		0.38	adi Factor						
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Li	near	6.000.00	Dollars

Factors 6000 dollars Line Item 2CDETDDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	25,965.00	Dollars
	Factors	25965 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6,000.00	Dollars
	Factors	6000 dollars							

Line Item 2CDETDEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

WBS No: 1BAD04 Activity ID: 1B07D03500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1BAD

Starts In FY *

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	150.567.40	Dollars
	Factors	259599 Dollars		0.58	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETDEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	65.301.86	Dollars
_	Factors	171847 Dollars		0.38	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETDPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resource

ces		Cost Element	Skill			Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	13.099.00	Dollars
_	Factors	13099 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

6000 dollars Factors

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	83,144.50	Dollars
I	actors	83144.5 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	31,356.69	Dollars

31356.7 Dollars Factors

WBS No: 1BAD	WBS No: 1BAD05 Title: Decommissioning Set 5 Module E											
Activity ID: 1B07	7E00500 Description: IWCP Development - Module	e E						Cost Risk	2 Schedule R	risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEEPL0	2CDPEEPL0 D&D E MODULE SET 5 PLANNING & ENGINEERING		each	НС	3.593	3.593	106.582	312.584	0	419.166	41.021	460.186

Page 40 of 145 6/22/00 9:31:29 PM OFFICIAL USE ONLY

WBS No: 1BAD05 **Rocky Flats Closure Project** 1B07E00500 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1BAD Andinien Filens *

Ctuata In EV *

								Acı	ivuv riiier			Su	IFIS IN F I	
SYS	Contingency And Escalation	1.00	ea	EE	0		0	0		0	69.820	69.820	0	69.820
	Tot	al for Activi	ty 1B07E005			3.	593	106.582	312.5	84	69.820	488.985	41.021	530.006

Line Item 2CDPEEPL0 - D&D E MODULE SET 5 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	216.00 Hours
	Factors	1 Engineer		720 hours		0.3 adi Factor		
	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	559.00 Hours
	Factors	1 engineer		559 hours				
	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	547.00 Hours
	Factors	1 engineer		1094 hours		0.5 adi. Factor		
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.552.00 Hours
	Factors	4 Engineers		1552 hours		0.25 adi. Factor		
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	639.20 Hours
1	Factors	2 Admin Assist.		1598 hours		0.2 adi. Factor		<u>, </u>
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00 Hours
1	Factors	2 D&D Workers (walkdowns)		40 hours				<u>, </u>
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	139.457.20 Dollars
1	Factors	6 planners		1312 hours		63.27 Dollars per hour	0.28 adi. Factor	<u>, </u>
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
1	Factors	69728 dollars		0 adi. Factor				
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	17.223.57 Dollars
ú	Factors	1081 hours	1	53.11 \$/hr		0.3 adi. Factor		
	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	59.741.02 Dollars
	Factors	838 hours		71.29 \$/hr			Г	1
	A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	59.858.04 Dollars
	Factors	1644 hours		72.82 \$/hr		0.5 adi. Factor	Г	
	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	16.376.05 Dollars
1	Factors	524 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safet	v ena.
	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	19.927.68 Dollars
ú	Factors		1	77.6 \$/hr		0.4 adi. Factor		
	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
	Factors	545357 Powertool balance adi		0 adi factor for 11.9 % reduction	n			

Factors 545357 Powertool balance adj. adi factor for 11.9 % reduction

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
L	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	46.422.34	Dollars
4	Factors	46422.3 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	23.397.46	Dollars

23397.5 Dollars Factors Activity ID: 1B07F02500 Description: Glovebox and equipment stripout - Modu

Activity ID: 1B0	TE02500 Description: Glovebox and equipment str		Cost Risk	2 Schedule R	Pisk 2							
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		ı
2CDEDECV0	Remove Chainveyors to SR	1.00	each	НС	19,959	19,959	464,708	263,636	0	728,344	167,729	896,073

1BAD05 Rockv Flats Closure Proiect Proiect Baseline Devl
1B07E02500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

						Activ	vitv Filter *		Sta	irts In FY *	
2CDEDEDC0	Decontaminate Set	1.00 each	HC	2.373	2.373	54.023	27.726	0	81.749	19.499	101.248
2CDEDEDR0	Duct Removal	1.00 each	HC	5.165	5.165	120.407	60.450	0	180.857	43.459	224.316
2CDEDEEA0	Electrical & Alarms	1.00 each	HC	7.634	7.634	178.899	74.991	0	253.890	64.571	318.461
2CDEDEEE0	External Equipment Removal	1.00 each	HC	1.502	1.502	34.933	23.989	0	58.922	12.608	71.531
2CDEDEIE0	GB Internal Equipment Removal	1.00 each	HC	2.268	2.268	53.273	39.360	0	92.633	19.228	111.861
2CDEDEIP0	Reduce GB In Place	1.00 each	HC	17.847	17.847	415.622	232.779	0	648.401	150.012	798.413
2CDEDEPR0	Pipe Removal	1.00 each	HC	4.307	4.307	100.122	45.522	0	145.644	36.138	181.782
2CDEDESR0	Remove GB to Size Reduce	1.00 each	HC	19.807	19.807	463.048	313.545	0	776.593	167.130	943.722
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	675.706	675.706	0	675.706
		Total for Activity 1B07E0)2500:		80.862	1.885.035	1.081.998	675.706	3.642.739	680.372	4.323.112

Line Item 2CDEDECV0 - Remove Chainveyors to SR

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	62.00 Hours
į	Factors	62 Hours						
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	4.454.00 Hours
į	Factors	4454 Hours				T		
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	203.00 Hours
į	Factors	203 Hours		_				
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	1.290.60 Hours
À	Factors			0.9 adi. to allocate Waste Ops for				
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	2.962.50lHours
ď	Factors	4404 Hours		0.67268 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	7.396.00 Hours
ď	Factors					T		
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	12.00 Hours
ď	Factors		0.100	D0D 01/11 / ED TD 10 E0	1/20011	D=0= F	T	
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	891.00 Hours
ď	Factors	891 Hours	1.000	MICCION OUR OREO II (FLTTOU MO	KDOOLI	DZOZ E WY M		44.00
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B/U/ Facilities Management	Linear	41.00 Hours
ď	Factors 751	41 Hours OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KDOOC	B707 Facility Disposition	Linner	287.00 Hours
L			IVIUTU	IFOREIMEN / TEAM LEADS / GROUP	NDSUS	B/0/ Facility Disposition	Linear	287.00IHOUIS
ď	Factors 751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KDEUL	P707 Eng Envir Office Quality	Linear	881.00 Hours
L	Factors		1030	IRADIATION CONTROL TECHNOLIGI	NDSUIT	B707 Elid Elivii. Sitv & Quality	Lilleal	881.00HOUIS
ſ	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.479.00 Hours
L	Factors		1000	IDAD HAZ KEDOC TECHT KISK KED	INDOULL	DTOT I ACIIIIV DISDOSITION	Lilleal	1.473.001110013
ſ	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	164.689.20 Dollars
	Factors	550317 Dollars	0000	0.53549 adi Factor	112000	0.55886 adi. To remy. Waste costs		10 1.000.E0IDOllars
ſ	A5H	SUBCONTRACTED SRVS	F130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	98.947.00 Dollars
	Factors		_ 100			IETOT I MOINT ETONOMINUT	=!001	

Factors 98947 Dollars

Line Item 2CDEDEDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Page 42 of 145 6/22/00 9:31:31 PM *OFFICIAL USE ONLY*

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter
*

Baseline Devl
1BAD
*

**

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD05

1B07E02500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	32.00 Hours
Factors 32 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	118.00 Hours
Factors 118 Hours				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	360.00 Hours
Factors 275 Hours	1.30909 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	1.498.00 Hours
Factors 1498 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	6.00 Hours
Factors 6 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	4.00 Hours
Factors 4 Hours	T			
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	55.00lHours
Factors 55 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	300.00 Hours
Factors 300 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	27.725.87 Dollars
Factors 46993 Dollars	0.59 adi Factor			

Line Item 2CDEDEDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
Factors	15 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.240.00	Hours
Factors	2240 Hours							
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	127.00	Hours
Factors	127 Hours							
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	354.60	Hours
Factors	394 Hours		0.9 adi, to allocate Waste Ops for	remen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	751.50	Hours
Factors	1017 Hours		0.73894 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	766.00	Hours
Factors	766 Hours							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
Factors	3 Hours							

Page 43 of 145 6/22/00 9:31:31 PM *OFFICIAL USE ONLY*

Starts In FY *

WBS No:1BAD05Rocky Flats Closure ProjectProjectBaseline DevlActivity ID:1B07E02500Baseline Cost and Basis of EstimateWBS Filter1BAD

		Dascillic Gost al	ia Basis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	448.00 Hours
Factors 448 Hours		_	1			
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	25.00 Hours
Factors 25 Hours		_	1			
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	79.00 Hours
Factors 79 Hours		_	1			
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	203.00 Hours
Factors 203 Hours		_	1			
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	153.00 Hours
Factors 153 Hours			,			
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	60.449.63 Dollars
- 1001= 5 "		0.50				

Factors 102457 Dollars 0.59 adi Factor

Line Item 2CDEDEEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element	Skill		Department	Curve	Quantity Units
_ 7	50 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	365.00 Hours
Fac	tors 365 Hours		ı			
7	50 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.340.00 Hours
Fac	tors 1340 Hours					
_ 7	50 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	236.00 Hours
Fac	tors 236 Hours	T	ı			
_ 7	50 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	613.80 Hours
	tors 682 Hours	0.9 adi. to allocate Waste Ops f				
	50 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	989.75 Hours
	tors 1658 Hours	0.59695 4 to 1 adi. Factor				
	50 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.619.00 Hours
	tors 2619 Hours	TOTO MAINT TEOLIO (INICTELIMENT TEO	I/Dool I	D707 F 199 M		00.0011
	50 STRAIGHT TIME BASE tors 90 Hours	T070 MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
	tors 90 Hours 51 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KD40LI	707 Complex Steelworkers	Linear	73.00 Hours
	tors 73 Hours	CU2U JELECTRICIANS	KBIUH	707 Complex Steetworkers	Lilledi	73.00[Hours
	51 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	268.00 Hours
	tors 268 Hours	C120 ID&D SKILLED INADES	INDS011	DIOI I ACIIIL DISDOSILION	Lilleal	200.001110013
	51 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	47.00 Hours
	tors 47 Hours			TO THE PROPERTY OF THE PROPERT	=II I V Sai	
7	51 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	136.00 Hours
Fac	tors 136 Hours					
_ 7	51 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	332.00 Hours
Fac	tors 332 Hours		ı			
_ 7	51 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	524.00 Hours
Fac	tors 524 Hours					
Α	5C SUPPLIES	0000 NONE	KB30S	B707 Facility Disposition	Linear	74.991.04 Dollars
Fac	tors 177951 Dollars	0.59 adi Factor		0.71426 adi. To remv. Waste costs		

Page 44 of 145 6/22/00 9:31:32 PM *OFFICIAL USE ONLY*

WBS No: 1BAD05 *Activity ID:* 1B07E02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY *

Line Item 2CDEDEEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 H	lours
Factors		1	1		1			
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	440.00	lours
Factors					1			
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	11.00H	lours
Factors					T			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	51.00H	lours
Factors 750	51 Hours STRAIGHT TIME BASE	T050	DADIATION CONTROL TECHNICIS	KDEOLL	B707 Eng Envir. Sftv & Quality	Linna	007.051	1
Factors		1050	IRADIATION CONTROL TECHNOLIGI 0.49188 4 to 1 adi. Factor	ИРООП	B/0/ End Envir. Sitv & Quality	Linear	227.25H	iours
750	STRAIGHT TIME BASE	TOGO	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	469.00 H	loure
Factors		1000	IDAD HAZ REDOO TEOHA RIOR RED	INDOUTT	DIOT I dollity Disposition	Linear	703.0011	iouis
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 H	lours
Factors	3 Hours							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	88.00 H	lours
Factors	88 Hours				1			
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	2.00	lours
Factors					1			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	10.00lF	lours
Factors				1/2=011	D=0= E		20.00	
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	92.00	lours
Factors 751	92 Hours OVERTIME BASE & PRE.	T060	D&D LIAZ DEDLIC TECH / DISK DED	KD20LL	B707 Facility Disposition	Linear	94.00 H	laura
Factors		Udu	D&D HAZ REDUC TECH / RISK RED	NDSUH	DIVI FACILIV DISDOSILION	Linear	94.00[iours
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	23.989.40	Onllars
Factors		0300	0.59 adi Factor	1,0000	pror i dome proposition	Linear	25.505.701	ZUIIGIO

Line Item 2CDEDEIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department		Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	598.00	Hours
	_	=00 II							

WBS No: 1BAD05 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1B07E02500 WBS Filter 1BAD Rasaline Cost and Rasis of Estimate

	Baseline Cost a	nd Basis of Estimate	tivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	36.00 Hours
Factors 36 Hours				<u> </u>
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	163.80 Hours
Factors 182 Hours	0.9 adi. to allocate Waste Ops	foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	323.75 Hours
Factors 645 Hours	0.50194 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	697.00 Hours
Factors 697 Hours			1	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00lHours
Factors 3 Hours			T	
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	120.00lHours
Factors 120 Hours				<u> </u>
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	7.00lHours
Factors 7 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	36.00 Hours
Factors 36 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	129.00 Hours
Factors 129 Hours	T L			
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	139.00 Hours
Factors 139 Hours	T I			
A5C SUPPLIES	I 0000 INONE	KB30S B707 Facility Disposition	Linear	30.025.10 Dollars
Factors 50890 Dollars	0.59 adj Factor			
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	9.335.00 Dollars
Factors 9335 Dollars				

Line Item 2CDEDEIP0 - Reduce GB In Place

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Dabit	s for adjustment -							
s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	32.00	Hours
Factors	32 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	4.190.00	Hours
Factors	4190 Hours				_			
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	145.00	Hours
Factors	145 Hours				_			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	1.108.80	Hours
Factors	1232 Hours		0.9 adi. to allocate Waste Ops for	oremen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	2.665.25	Hours
Factors	4109 Hours		0.64864 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	6.471.00	Hours
Factors	6471 Hours							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	6.00	Hours
Factors	6 Hours							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	838.00	Hours
Factors	838 Hours							

Page 46 of 145 6/22/00 9:31:33 PM OFFICIAL USE ONLY WBS No: 1BAD05 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07E02500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

	Duscille Cost (and Busis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Manageme	nt Linear	29.00 Hours
Factors 29 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	246.00 Hours
Factors 246 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIG	I KB50H B707 Ena Envir. Sftv & Qu	ality Linear	822.00 Hours
Factors 822 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	1.294.00 Hours
Factors 1294 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	144.614.90 Dollars
Factors 504432 Dollars	0.59 adi Factor	0.48591 adi. To remv. Wa	aste costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	88.164.00 Dollars

Factors 88164 Dollars

Line Item 2CDEDEPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.426.00	Hours
_1	Factors	2426 Hours							
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	84.00	Hours
_1	Factors	84 Hours	ı		I				т
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	315.00	Hours
1	Factors	350 Hours	1	0.9 adi. to allocate Waste Ops for	oremen				
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	639.75	Hours
Į.	Factors	548 Hours		1.16743 4 to 1 adi. Factor		T			
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00	Hours
Į.	Factors	133 Hours		T					
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	485.00	Hours
Į.	Factors	485 Hours		Γ	ı	T			
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	17.00	Hours
Į.	Factors	17 Hours		Г	ı	T			
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	70.00	Hours
Į.	Factors	70 Hours		Г	ı	T			
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	110.00	Hours
Į.	Factors	110 Hours		Г	ı	T			
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00	Hours
Į.	Factors	27 Hours		T					
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	45.522.04	Dollars
ì	Factors	77156 Dollars		0.59 adi Factor					

Line Item 2CDEDESR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Page 47 of 145 6/22/00 9:31:34 PM *OFFICIAL USE ONLY*

WBS No: 1BAD05 Rocky Flats Closure Project
Activity ID: 1B07E02500 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY *

Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

_								
es	Cost Element		Skill		Department	Curve	Quantity	Units
L	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	61.00	Hours
į	Factors 61 Hours	ı						
L	750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	5.159.00	Hours
À	Factors 5159 Hours							
L	750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	219.00	Hours
į	Factors 219 Hours	1	1					
L	750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	1.533.60	Hours
ď	Factors 1704 Hours	1	0.9 adi. to allocate Waste Ops f					
L	750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	2.889.75	Hours
ď	Factors 4180 Hours		0.69133 4 to 1 adi. Factor					
L	750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	6.400.00	Hours
ď	Factors 6400 Hours	0000	EL EGEDIOLANO	I/D40II	707.0	11	40.00	
L	751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	12.00	Hours
ď	Factors 12 Hours 751 OVERTIME BASE & PRE.	0100	D&D SKILLED TRADES	KD20LL	B707 Facility Disposition	Linear	1.032.00	Llaura
L	Factors 1032 Hours	C120	ID&D SKILLED TRADES	KBSUH	B707 Facility Disposition	Lilledi	1.032.00	HOUIS
ſ	751 OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	44.00	Hours
L	Factors 44 Hours	LUUU	INICOION COI CI EC II (I ET TOTI: VC	INDZ011	15707 Tacilities ivial lacement	Lincai	77.00	ilouis
ſ	751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	341.00	Hours
_	Factors 341 Hours							
	751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	836.00	Hours
ز	Factors 836 Hours							
L	751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.280.00	Hours
į	Factors 1280 Hours	ı						
L	A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	217.308.80	Dollars
ď	Factors 537812 Dollars		0.59 adi Factor		0.68485 adi. To remv. Waste costs			1
L	A5H SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	96.236.00	Dollars
1	Factors 96236 Dollars							

Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
[CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	464.391.30	Dollars
	Factors	464391 Dollars							
Į	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	211.315.00	Dollars

Factors 211315 Dollars

Activity ID: 1B07E03500 Description: IWCP Execution Trades - Module E Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity U	Inits BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETEDC0	Decontaminate Set	1.00 each	HC HC	0	0	0	156.066	0	156.066	0	156.066
2CDETEDR0	Duct Removal	1.00 each	HC HC	0	0	0	25.691	0	25.691	0	25.691
2CDETEEA0	Electrical & Alarms	1.00 each	HC HC	0	0	0	164.479	0	164.479	0	164.479
2CDETEEE0	External Equipment Removal	1.00 each	HC HC	0	0	0	28.263	0	28.263	0	28.263
2CDETEPR0	Pipe Removal	1.00 each	HC HC	0	0	0	21.431	0	21.431	0	21.431
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	56.966	56.966	0	56.966
	To	tal for Activity 1B	07F03500:		0	0	395 931	56 966	452 897	0	452 897

Line Item 2CDETEDC0 - Decontaminate Set

BOE Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779

Page 48 of 145 6/22/00 9:31:34 PM *OFFICIAL USE ONLY*

Rocky Flats Closure Project Baseline Cost and Basis of Estimate Proiect WBS Filter Activity Filter

1BAD

Baseline Devl

Starts In FY

and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD05

1B07E03500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

s	Cost Element		Skill		Department		Curve	Ouantity	Units
	A5B CONSTRUCTION	C120	D&D SKILLE	ED TRADES	KB20C Building Trades Pro	oi B Estimating Only	Linear	150.066.30	Dollars
	Factors 326231 Dolla	'S	0.46 a	adi Factor					
	A5C SUPPLIES	0000	NONE		KB30S B707 Facility Dispo	sition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETEDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5B CONSTRUCTION C120 D&D SKILLED TRADES		KB20C	Building Trades Proj B Estimating Only	Linear	19,691.00	Dollars		
	Factors	19691 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6,000.00	Dollars
	Factors	6000 dollars							

Line Item 2CDETEEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

ces	Cost Element	Skill	Department	Curve	Quantity Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proj B Estimating Only	Linear	158.479.20 Dollars
	Factors 240120 Dollars	0.66 adi Factor			
	A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	6.000.00 Dollars
	Factors 6000 dollars				

Line Item 2CDETEEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Page 49 of 145 6/22/00 9:31:35 PM OFFICIAL USE ONLY WBS No:1BAD05Rocky Flats Closure ProjectActivity ID:1B07E03500Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1
Activity Filter *

Baseline Devl 1BAD

Starts In FY *

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element			Skill		Department		Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	22.263.08	Dollars
	Factors	48398 Dollars		0.46	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETEPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	15.431.00	Dollars
	Factors	15431 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resources		
	CON	C

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.950.21	Dollars
	Factors	18950.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	38.015.78	Dollars

Factors 38015.8 Dollars

WBS No: 1BAD	06 Title: Decommissioning Set 6 N	odule F										
Activity ID: 1B0	7F00500 Description: IWCP Development - Modu	le F						Cost Risk	2 Schedule R	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEFPL0	DPEFPL0 D&D F MODULE SET 6 PLANNING & ENGINEERING		1.00 each		996	996	29.002	82.009	0	111.011	13.879	124.890
SYS	S Contingency And Escalation		1.00 ea		0	0	0	0	5.456	5.456	0	5.456
	tal for Activi	ty 1B07F005	500:		996	29.002	82.009	5.456	116.468	13.879	130.346	

Line Item 2CDPEFPL0 - D&D F MODULE SET 6 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element	Skill	Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	S100S SSOC Salaried	Linear	56.76 Hours
	Factors	1 Engineer	189.2 hours	0.3 adi Factor		

WBS No: 1BAD06 **Rocky Flats Closure Project** 1B07F00500 Activity ID: Rasoline Cost and Rasis of Estimate

Baseline Devl Proiect WBS Filter 1BAD

	Baseline Cost an	nd Basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	E040 ELECTRICAL ENGINEERS	S100S SSOC Salaried	Linear	147.00 Hours
Factors 1 engineer	147 hours			
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	S100S SSOC Salaried	Linear	143.70 Hours
Factors 1 engineer	287.4 hours	0.5 adi. Factor		
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	402.60 Hours
Factors 4 Engineers	402.6 hours	0.25 adi. Factor		
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	KB30S B707 Facility Disposition	Linear	165.84 Hours
Factors 2 Admin Assist.	414.6 hours	0.2 adi. Factor		Г
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	80.00 Hours
Factors 2 D&D Workers (walkdowns	s) 40 hours	т		ı
A57 LATA	P070 COST ESTIMATORS PLANNERS AN	KB30S B707 Facility Disposition	Linear	36.618.14 Dollars
Factors 6 planners	344.5 hours	63.27 Dollars per hour	0.28 adi. Factor	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	0.00 Dollars
Factors 18307 dollars	0 adi. Factor			
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quali	itv Linear	4.518.60 Dollars
Factors 283.6 hours	53.11 \$/hr	0.3 adi. Factor		
A5H SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quali	itv Linear	15.683.80 Dollars
Factors 220 hours	71.29 \$/hr			
A5H SUBCONTRACTED SRVS	LE070 IMECHANICAL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quali	itv Linear	15.692.71 Dollars
Factors 431 hours	72.82 \$/hr	0.5 adi. Factor		
A5H SUBCONTRACTED SRVS	L E080 INUCLEAR (CRITICALITY) ENGINEER			4.250.27 Dollars
Factors 136 hours	96.16 \$/hr	0.5 adj. Factor	0.65 nuclear safet	
A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	KB50S B707 Eng Envir, Sfty & Quali	ity Linear	5,245.76 Dollars
Factors 169 hours	77.6 \$/hr	0.4 adj. Factor		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	0.00 Dollars
Factors 209362 Powertool balance adj.	0 adj factor for 11.9 % reduction	on		

Line Item SYS - Contingency And Escalation

BOE

Resources

ces	Cost Ele	ment	Skill		Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.200.34	Dollars
	Factors 3200.34 Dolla	ırs						
	ESC ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.256.04	Dollars
	Factors 2256.04 Dolla	ırs						

Activity ID: 1B07	7F02500 Description: Glovebox and equipment str	ipout - Mod	u					Cost Risk	2 Schedule R	isk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDFCV0	Remove Chainvevors to SR	1.00	each	HC	4.405	4.405	102.281	30.742	0	133.023	48.788	181.811
2CDEDFDC0	Decontaminate Set	1.00	each	HC	2.396	2.396	54.490	28.196	0	82.686	25.992	108.677
2CDEDFDR0	Duct Removal	1.00	each	HC	3.627	3.627	84.641	32.963	0	117.604	40.374	157.978
2CDEDFEA0	Electrical & Alarms	1.00	each	HC	10.099	10.099	237.310	57.102	0	294.412	113.197	407.609
2CDEDFEE0	External Equipment Removal	1.00	each	HC	518	518	12.221	7.493	0	19.714	5.829	25.544
2CDEDFPR0	Pipe Removal	1.00	each	HC	2.314	2.314	53.736	24.658	0	78.394	25.632	104.026
2CDEDFSR0	Remove GB to Size Reduce	1.00	each	HC	1.593	1.593	36.905	27.151	0	64.056	17.604	81.660
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	57.077	57.077	0	57.077
	Tot	al for Activi	tv 1B07F025	00:		24.950	581.584	208.305	57.077	846.966	277.416	1.124.382

Line Item 2CDEDFCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Page 51 of 145 6/22/00 9:31:36 PM OFFICIAL USE ONLY

WBS No: 1BAD06 1B07F02500 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1BAD

Starts In FY *

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	19.00 Hours
Factors	19 Hours			,		1	
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.110.00 Hours
Factors	1110 Hours		T		1	T	
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	34.00lHours
Factors			T				
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	238.50 Hours
Factors			0.9 adi. to allocate Waste Ops for				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	664.25 Hours
Factors			0.67574 4 to 1 adi. Factor		T	1	1
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.547.00lHours
Factors			I.,		T		
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	4.00 Hours
Factors		0400	DAD OKULED TRADEO	I/Dool I	DZOZ E W D: W	1	000 0011
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	222.00 Hours
<i>Factors</i> 751	222 Hours OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KBOOL	B707 Facilities Management	Linear	7.00 Hours
Factors		LUOU	INISSION SUP SPEC II (PLTTCH, WS	NDZUIT	B/0/ Facilities Management	Lilledi	7.00IHOUIS
751	OVERTIME BASE & PRE.	MO10	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	53.00 Hours
Factors		IVIOTO	II OKLIVILIY TEAW LEADO / GROOT	NDOOC	DIOT I dollity Disposition	Lincai	33.001110413
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	197.00 Hours
Factors					TELOT EINS EITHIN SIX SESSION		1011001110011
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	309.00 Hours
Factors	309 Hours						
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	30.742.11 Dollars
Factors	101237 Dollars		0.6 adi Factor		0.50611 adi. To remv. Waste costs		

Line Item 2CDEDFDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

	Dabi	o ror aajabomene						
es		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00 Hours
	Factors	32 Hours						
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
	Factors	118 Hours						
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sfty & Quality	Linear	382.50 Hours
	Factors	275 Hours		1.39091 4 to 1 adj. Factor				
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1,498.00 Hours
	Factors	1498 Hours						
	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00 Hours
	Factors	6 Hours						

Page 52 of 145 6/22/00 9:31:37 PM OFFICIAL USE ONLY WBS No: 1BAD06 Rocky Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07F02500 Raseline Cost and Basis of Estimate WBS Filter 1BAD

		Dascille Oost al	ia basis of Estimate	Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	4.00 Hours
Factors 4 Hours					
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Qual	itv Linear	55.00 Hours
Factors 55 Hours					
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	300.00 Hours
Factors 300 Hours					
A5C SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	28.195.80 Dollars
Factors 46002 Dollars		0.6 adi Easter			

Factors 46993 Dollars 0.6 adj Factor

Line Item 2CDEDFDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		. Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	0.00 H	ours
Factor.	s 0 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.278.00 H	ours
Factor.	s 1278 Hours		_		T			
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	103.00H	ours
Factor.								
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	242.10H	ours
Factor.			0.9 adi. to allocate Waste Ops for				-	
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	523.75H	ours
Factor.	1.00.0		0.61836 4 to 1 adi. Factor		T			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	817.00H	ours
Factor.		0000	EL EGERIQUANO	1/5 / 01 /				
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	0.00 H	ours
Factor.	OVERTIME BASE & PRE.	0400	D&D CKILLED TDADEC	KDOOLI	DZOZ E- ilit. Di iti	Linana	050.0011	
751		C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	256.00 H	ours
Factor.	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	P707 Excilition Management	Linear	21.00 H	ouro
Factor.		LUUU	INISSION SOF SELCTIVE LITTER. WS	NDZUIT	BTOT I aclitues ividifiadement	Lilleal	21.00 11	ouis
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	54.00 H	ours
Factor.		INIOTO	I CINEWEIV TEAMY EEABOA CINCOI	NDOOO	DTOT I dollity Disposition	Linear	0-1.00ji i	Ouis
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir Sfty & Quality	Linear	169.00 H	ours
Factor.							10010011	
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	163.00 H	ours
Factor.	s 163 Hours							
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	32.963.00 D	ollars
Factor.	71605 Dollars		0.6 adi Factor		0.76724 adi. To remv. Waste costs			

Line Item 2CDEDFEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Page 53 of 145 6/22/00 9:31:38 PM *OFFICIAL USE ONLY*

WBS No: 1BAD06 Activity **ID:** 1B07F02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1BAD

Starts In FY *

Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -

Revised Unit Cost -Basis for adjustment -

Resources

es _	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	297.00 Hours
F_{i}	actors 297 Hours	1			
	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.782.00 Hours
F_{ϵ}	actors 1782 Hours				
	750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	260.00 Hours
F_{ϵ}	actors 260 Hours				
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	841.50 Hours
F_{i}	actors 935 Hours	0.9 adi. to allocate Waste Ops f	oremen		
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	1.347.00 Hours
F_{i}	actors 2500 Hours	0.5388 4 to 1 adi. Factor			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	3.606.00 Hours
F_{i}	actors 3606 Hours				
	750 STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TEC	KB20H B707 Facilities Management	Linear	90.00 Hours
F_{i}	actors 90 Hours				
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	59.00 Hours
F_{i}	actors 59 Hours				
	751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	356.00 Hours
F_{i}	actors 356 Hours				
	751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Management	Linear	52.00 Hours
F_{i}	actors 52 Hours				
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	187.00 Hours
F_{i}	actors 187 Hours				
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	500.00 Hours
F_{i}	actors 500 Hours				
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	721.00 Hours
F_{i}	actors 721 Hours				
	A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	57.101.99 Dollars
F_{ϵ}	actors 245170 Dollars	0.47764 adi Factor	0.48763 adi. To remv. Waste costs		

Line Item 2CDEDFEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

s		Cost Element	Skill			Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	C020 ELECTRICIANS KE		707 Complex Steelworkers	Linear	0.00 Hours
I	actors	0 Hours						
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	141.00 Hours
I	actors	141 Hours						
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	2.00 Hours
I	actors	2 Hours						
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	54.00 Hours
1	actors	60 Hours		0.9 adi. to allocate Waste Ops for	oremen			

WBS No: 1BAD06 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07F02500 WBS Filter 1BAD Activity ID: Recoling Cost and Resis of Estimate

	Baseline Cost a	Ind Basis of Estimate	*	Starts In FY *
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	73.75 Hours
Factors 112 Hours	0.65848 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	154.00 Hours
Factors 154 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	0.00 Hours
Factors 0 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	28.00 Hours
Factors 28 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	0.00 Hours
Factors 0 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	12.00 Hours
Factors 12 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	22.00 Hours
Factors 22 Hours			1	
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	31.00 Hours
Factors 31 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	7.493.40 Dollars
Factors 12489 Dollars	0.6 adi Factor			

Factors 12489 Dollars 0.6 adi Factor

Line Item 2CDEDFPR0 - Pipe Removal

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units	
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.380.00 Hours	
Factors	1380 Hours							
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	46.00 Hours	
Factors	46 Hours							
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	165.60 Hours	
Factors	184 Hours		0.9 adi. to allocate Waste Ops f	oremen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	345.00 Hours	
Factors	276 Hours		1.25 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	0.00 Hours	
Factors	0 Hours							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	276.00 Hours	
Factors	276 Hours	1						
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	9.00 Hours	
Factors	9 Hours	1						
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	37.00 Hours	
Factors	37 Hours							
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours	
Factors	55 Hours							
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	0.00 Hours	
Factors	0 Hours							
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	24.657.60 Dollars	
Factors	41096 Dollars		0.6 adi Factor					

Page 55 of 145 6/22/00 9:31:39 PM OFFICIAL USE ONLY

WBS No: 1BAD06 1B07F02500 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect WBS Filter 1BAD Activity Filter

Starts In FY *

Line Item 2CDEDFSR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	0.00 Hours
r	Factors	0 Hours	•					
Ĺ	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	385.00 Hours
r	Factors	385 Hours						
Ĺ	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	8.00 Hours
Г	Factors		1	1				
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	75.60 Hours
г	Factors			0.9 adi. to allocate Waste Ops for				
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	244.75 Hours
F	Factors			0.69138 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	594.00lHours
Ī	Factors			1				
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	0.00lHours
ſ	Factors			L				
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	77.00 Hours
ſ	<u>Factors</u>		1.000	MICCION CUE OPEO II (EL TTOU MO	KDOOLI	D707 F 397 A4	1.1	0.0011
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B/U/ Facilities Management	Linear	2.00 Hours
ſ	Factors 751	2 Hours OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KDOOC	B707 Facility Disposition	Linear	17.00 Hours
L	Factors		IVIOTO	IFOREMEN / TEAM LEADS / GROUP	NDSUS	B707 Facility Disposition	Linear	17.00iHours
ſ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	71.00 Hours
L	Factors		1030	INADIATION CONTINUE TECHNOLICI	INDOULT	BTOT Elia Elivii. Oliv & Quality	Lilleal	71.00010013
Ī	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	119.00 Hours
	Factors		1000		TOOOTT	DIOT I dollity Diobootion	Eliloui	110.00010010
		SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	21.034.80 Dollars
	Factors	35058 Dollars		0.6 adi Factor				
	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	6.116.00 Dollars
	Factors	6116 Dollars						· ——

Factors 6116 Dollars Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	34.633.99	Dollars
	Factors	34634 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22.443.04	Dollars

22443.0 Dollars

Activity ID: 1B07F03500	Description: IWCP Execution Trades - Module F
Activity ID: 1B07F03500	Description: IWCP Execution Trades

Activity ID: 1B	Description: IWCP Execution Trades - M	odule F						Cost Risk	2 Schedule R	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETFDC0	Decontaminate Set	1.00	each	HC	0	0	0	146,279	0	146,279	0	146,279
2CDETFDR0	DETFDR0 Duct Removal		1.00 each		0	0	0	20,321	0	20,321	0	20,321
2CDETFEA0	CDETFEA0 Electrical & Alarms		each	HC	0	0	0	215.731	0	215.731	0	215.731

Page 56 of 145 6/22/00 9:31:40 PM OFFICIAL USE ONLY WBS No: 1BAD06 Rockv Flats Closure Project Baseline Devl
Activity ID: 1B07F03500 Baseline Cost and Basis of Estimate 1BAD

						Activ	uvriller		310	iris in F i	
2CDETFEE0	External Equipment Removal	1.00 each	HC	0	0	0	13.413	0	13.413	0	13.413
2CDETFPR0	Pipe Removal	1.00 each	HC	0	0	0	14.219	0	14.219	0	14.219
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	98.402	98.402	0	98.402
	Tot	Total for Activity 1B07F03500:				0	409 964	98 402	508 365	0	508 365

Line Item 2CDETFDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	140.279.30	Dollars
_	Factors	326231 Dollars		0.43	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars Line Item 2CDETFDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element Skill				Department	Curve	Quantity	Units	
	A5B CONSTRUCTION		C120	D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only		Linear	14.321.00	Dollars
	Factors	14321 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETFEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element Skill					Department	Curve	Quantity	Units	
	A5B	CONSTRUCTION	C120	D&D SKILL	_ED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	209.731.40	Dollars
	Factors	332907 Dollars		0.63	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETFEE0 - External Equipment Removal

BOE Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779

Andreiden Filance

Ctuata L. EV *

Proiect **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

WBS Filter Activity Filter Baseline Devl

1BAD

Starts In FY and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD06

1B07F03500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

s	Cost Element		Skill	Department	Curve	Ouantity	Units
	A5B CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	7.412.77	Oollars
	Factors 17239 Dollars		0.43 adi Factor				
	A5C SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	6.000.00	Oollars

Factors 6000 dollars

Line Item 2CDETFPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	8,219.00	Dollars
	Factors	8219 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6,000.00	Dollars
	Factors	6000 dollars							

Line Item SYS - Contingency And Escalation

BOE

Re	so	ur	ces

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	53.726.43	Oollars
	Factors	53726.4 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	44.675.40	Oollars

44675.4 Dollars

WBS No: 1BADO	7 Title: Decommissioning Set 7 M	odule G										
Activity ID: 1B07	G00500 Description: IWCP Development - Modul	e G						Cost Risk	2 Schedule R	risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEGPL0	D&D G MODULE SET 7 PLANNING & ENGINEERING	1.00	each	НС	1.075	1.075	31.367	89.113	0	120,479	15.038	135.517
SYS Contingency And Escalation		1.00	ea	EE	0	0	0	0	5.375	5.375	0	5.375
	To	tal for Activit	ty 1B07G005	500:		1.075	31.367	89.113	5.375	125.855	15.038	140.892

Line Item 2CDPEGPL0 - D&D G MODULE SET 7 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

6/22/00 9:31:41 PM Page 58 of 145 OFFICIAL USE ONLY

WBS No: 1BAD07 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1B07G00500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate** Activity Filter

Revised Unit Cost -Basis for adjustment -

Resources

		G . FI		CL.II			- C	0 1	** .
es	750	Cost Element	F000	Skill	04000	Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	\$1008	SSOC Salaried	Linear	61.65	Hours
	Factors	1 Engineer		205.5 hours	0.1000	0.3 adi Factor			ī
	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	159.60	Hours
	Factors	1 engineer		159.6 hours	0.1000	00000111	·	.=	<u> </u>
	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	156.10	Hours
	Factors	1 engineer		312.2 hours	1/2000	0.5 adi. Factor	·		l
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	437.50	Hours
	Factors	4 Engineers		437.5 hours		0.25 adi. Factor			l
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	180.20	Hours
	Factors	2 Admin Assist.		450.5 hours		0.2 adi. Factor			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
	Factors			40 hours					
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	39.785.70	Dollars
	Factors	6 planners		374.3 hours		63.27 Dollars per hour	0.28 adi. Factor		
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
	Factors	19890 dollars		0 adi. Factor					1
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	4.910.55	Dollars
	Factors	308.2 hours		53.11 \$/hr		0.3 adi. Factor			1
	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	17.066.83	Dollars
	Factors	239.4 hours		71.29 \$/hr					T
	A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	17.047.16	Dollars
	Factors	468.2 hours	1	72.82 \$/hr		0.5 adi. Factor			1
	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	4.619.05	Dollars
	Factors	147.8 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safet	v ena.	1
	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	5.683.42	Dollars
	Factors	183.1 hours		77.6 \$/hr		0.4 adi. Factor			т
	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
	Factors	208026 Powertool balance adi.		0 adi factor for 11.9 % reduction	n				

Line Item SYS - Contingency And Escalation

BOE

Resources

ces	Cost Element			Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3,152.86	Dollars
	Factors	3152.86 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2,222.58	Dollars

2222.58 Dollars Factors

Activity ID:	1B07G02500
--------------	------------

Description: Equipment stripout - Module G

Cost Risk 2 Schedule Risk

Starts In FY *

T 1 T.	B. Cal	0	** **	DOE	7 7	7 1 YY	7 1 C .	14 1 /6 1	a .:	m . In:	n 1 C .	T . 10 .
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub		Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDGBR	Be Equipment Removal	1.00	each	HC	2.481	2.481	57.580	20.508	0	78.087	27.466	105.553
2CDEDGDC0	Decontaminate Set	1.00	each	HC	2.373	2.373	54.548	25.846	0	80.394	26.019	106.414
2CDEDGDR0	Duct Removal	1.00	each	HC	5.128	5.128	119.280	35.942	0	155.221	56.896	212.118
2CDEDGEA0	Electrical & Alarms	1.00	each	HC	11.205	11.205	263.401	59.232	0	322.633	125.642	448.275
2CDEDGEE0	External Equipment Removal	1.00	each	HC	2.654	2.654	61.507	27.303	0	88.810	29.339	118.149
2CDEDGPR0	Pipe Removal	1.00	each	HC	3.236	3.236	75.248	21.963	0	97.211	35.893	133.104
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	60.088	60.088	0	60.088
	Tot	al for Activ	ity 1B07G02	500:		27.078	631.563	190.793	60.088	882.445	301.256	1.183.700

Line Item 2CDEDGBR - Be Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated,

Page 59 of 145 6/22/00 9:31:42 PM OFFICIAL USE ONLY Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY *

modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost
Unit Cost Adjustment factor
Revised Unit Cost
Basis for adjustment -

Resources

WBS No:

Activity ID:

1BAD07

1B07G02500

es		Cost Element		Skill		Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	6.00 Ho	ours
r	Factors	6 Hours				1		T	
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	543.00 Ho	ours
г	Factors	543 Hours	1		ı				
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	23.00 Ho	ours
Г	Factors	23 Hours	l			T==== =			
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	124.00 Ho	ours
ſ	Factors	124 Hours		DADIATION CONTROL TECHNOLOGI	1/0=011	D=0= 5 5 1 00 0 0 W			
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sfty & Quality	Linear	374.75 Ho	ours
ſ	Factors 750	615 Hours STRAIGHT TIME BASE	TOCO	0.60935 4 to 1 adj. Factor D&D HAZ REDUC TECH / RISK RED	KD20LL	B707 Facility Disposition	Linner	056.00116	
L	Factors	956 Hours	1060	D&D HAZ REDUC TECH / RISK RED	KBSUH	B707 Facility Disposition	Linear	956.00 Ho	ours
	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KR10H	707 Complex Steelworkers	Linear	1.00 Ho	nure
	Factors	1 Hours	0020	TELEO TIMOTA MO	I INDIOIT	TO COMBIEN CICCIWOTROIS	Linear	1.001110	Juis
	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	109.00 Ho	ours
	Factors	109 Hours							
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	5.00 Ho	ours
r	Factors	5 Hours							
Ĺ	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	25.00 Ho	ours
г	Factors	25 Hours				1		T	
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	123.00 Ho	ours
Г	Factors	123 Hours	1					1	
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	191.00lHc	ours
ſ	Factors	191 Hours	2005	NONE	LCDOOC	D707 F 37 B: 37	1	00 507 60 5	
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	20.507.63 Do	ollars
	Factors	55469 Dollars		0.55 adi Factor		0.67221 adj. To remv. Waste costs			

Line Item 2CDEDGDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

ces	Cost Element			Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.498.00	Hours
	Factors	1498 Hours							
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00	Hours
	Factors	118 Hours							
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	360.00	Hours
	Factors	275 Hours		1.30909 4 to 1 adi. Factor					

Page 60 of 145 6/22/00 9:31:42 PM *OFFICIAL USE ONLY*

WBS No: 1BAD07 Rocky Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07G02500 Reseline Cost and Resis of Estimate WBS Filter 1BAD

		Baseline Cost an	Id Basis of Estimate Activity F	ilter *	Starts In FY *
750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	32.00 Hours
Factors 32 Hours					
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	300.00 Hours
Factors 300 Hours					
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	4.00 Hours
Factors 4 Hours		T			
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours
Factors 55 Hours	I				
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	6.00 Hours
Factors 6 Hours	T.				
A5C SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	25.846.15 Dollars

Factors 46993 Dollars 0.55 adj Factor

Line Item 2CDEDGDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
Į	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
ŕ	Factors	15 Hours	1					
Į	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.123.00lHours
ŕ	Factors	2123 Hours						
Ĺ	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	245.00lHours
ſ	Factors	245 Hours	M010	FOREMEN / TEAM LEADS / OROUG	LCDOOO	D707 F 35 D: 55	11	0.40.00 1
L	750 Factors	STRAIGHT TIME BASE 388 Hours	MOTO	FOREMEN / TEAM LEADS / GROUP 0.9 adi, to allocate Waste Ops for		B707 Facility Disposition	Linear	349.20 Hours
ſ	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI		R707 Eng Envir Sfty & Quality	Linear	722.25 Hours
L	Factors	1000 Hours	1000	0.72225 4 to 1 adi. Factor	NDSOIT	Dror End Envir. Sity & Quality	Lineal	122.23 110013
	750	STRAIGHT TIME BASE	T060		KB30H	B707 Facility Disposition	Linear	766.00 Hours
	Factors	766 Hours						
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 Hours
г	Factors	3 Hours						
Ĺ	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	425.00 Hours
Г	Factors	425 Hours						
Į	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	49.00 Hours
ſ	Factors 751	49 Hours OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KBane	B707 Facility Disposition	Linear	78.00 Hours
L	Factors	78 Hours	INIOTO	II OKLIVILIN / TLAW LLADS / GROOF	NDSUS	IBTOT I ACIII V DISPOSITION	Lilical	76.00ii louis
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sftv & Quality	Linear	200.00 Hours
_	Factors	200 Hours						
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	153.00 Hours
г	Factors	153 Hours						
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	35.941.74 Dollars
	Factors	101712 Dollars		0.55 adi Factor		0.64249 adi. To remv. Waste costs		

Line Item 2CDEDGEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Page 61 of 145 6/22/00 9:31:43 PM *OFFICIAL USE ONLY*

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect

WBS Filter

Activity Filter

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD07

1B07G02500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

es	Cost Element	Skill		Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	333.00 Hours
į	Factors 333 Hours					
L	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.923.00 Hours
į	Factors 1923 Hours					
L	750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	276.00 Hours
À	Factors 276 Hours		ı			
L	750 STRAIGHT TIME BASE			B707 Facility Disposition	Linear	945.00lHours
ř	Factors 1050 Hours	0.9 adi. to allocate Waste Ops f				
L	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.496.00lHours
ř	Factors 2760 Hours	0.54203 4 to 1 adi. Factor				
L	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	4.061.00lHours
ď	Factors 4061 Hours	T [
L	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
ď	Factors 90 Hours	C020 ELECTRICIANS	KD40LL	707 Complex Steelworkers	Linna	67.00 Hours
L	751 OVERTIME BASE & PRE.	L CO20 JELECTRICIANS	KBTUH	707 Complex Steelworkers	Linear	67.00[Hours
ď	Factors 67 Hours 751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KBSUH	B707 Facility Disposition	Linear	385.00 Hours
L	Factors 385 Hours	C120 ID&D SKILLED TRADES	KDSUH	B707 Facility Disposition	Lilleal	383.00[Hours
ſ	751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	55.00 Hours
<u> </u>	Factors 55 Hours	LOGO INICOLOTA COL CI LO II VI EL TOLI. WO	NDZUIT	DTOT I delities Wanddernent	Lincal	30.00 110413
ſ	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	210.00 Hours
_	Factors 210 Hours					
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	552.00 Hours
į	Factors 552 Hours					
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	812.00 Hours
į	Factors 812 Hours		ı			
L	A5C SUPPLIES	0000 NONE	KB30S	B707 Facility Disposition	Linear	59.232.00 Dollars
1	Factors 271331 Dollars	0.43943 adi Factor		0.49678 adj. To remv. Waste costs		

Line Item 2CDEDGEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element	Skill			Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	791.00	Hours
	Factors	791 Hours							

Baseline Devl

Starts In FY *

1BAD

WBS No: 1BAD07 **Rocky Flats Closure Project** 1B07G02500 Activity ID: **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1BAD

	Daseille C	OSI and Dasis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTC)	H. WS KB20H B707 Facilities Managem	ent Linear	22.00 Hours
Factors 22 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GR	OUP KB30S B707 Facility Disposition	Linear	68.00 Hours
Factors 68 Hours				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHN	OLIGI KB50H B707 Ena Envir. Sftv & C	uality Linear	408.25 Hours
Factors 803 Hours	0.50841 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	842.00 Hours
Factors 842 Hours			<u></u>	
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworke	rs Linear	3.00 Hours
Factors 3 Hours			<u></u>	
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	158.00 Hours
Factors 158 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTC)	H. WS KB20H B707 Facilities Managem	ent Linear	4.00 Hours
Factors 4 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GR	OUP KB30S B707 Facility Disposition	Linear	14.00 Hours
Factors 14 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHN	OLIGI KB50H B707 Ena Envir. Sftv & C	uality Linear	161.00 Hours
Factors 161 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	168.00 Hours
Factors 168 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	27.302.74 Dollars
Factors 67823 Dollars	0.55 adj Factor	0.73193 adj. To remv. V	Vaste costs	

Line Item 2CDEDGPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.786.00	Hours
Factors	1786 Hours			,				,
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	63.00	Hours
Factors	63 Hours		T	T				
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	237.60	Hours
Factors	264 Hours		0.9 adi. to allocate Waste Ops for	oremen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	482.75	Hours
Factors	420 Hours		1.14940 4 to 1 adi. Factor	1				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00	Hours
Factors	133 Hours	1	T					
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	357.00	Hours
Factors	357 Hours		Γ	ı				
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	13.00	Hours
Factors	13 Hours		Τ	I				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	53.00	Hours
Factors	53 Hours		Τ	ı				
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	84.00	Hours
<u>Factors</u>	84 Hours							

Page 63 of 145 6/22/00 9:31:44 PM OFFICIAL USE ONLY WBS No: 1BAD07 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1B07G02500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

	Dasei	Action Basis of Estimate	ctivity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH	/ RISK RED KB30H B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours	•		•	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	21.963.16 Dollars

Factors 58115 Dollars 0.55 adj Factor 0.68714 adj. To remv. Waste costs

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	36.461.14	Dollars
	Factors	36461.1 Dollars							
		ESCALATION	0000	NONE	7DFPT	No Department	Linear	23 627 04	Dollars

Factors 23627.0 Dollars

Activity ID: 1B	07G03500 Description: IWCP Execution Trades -	Module G						Cost Risk	2 Schedule B	Risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETGBR	Be Equipment Removal	1.00	each	HC	0	0	0	12.104	0	12.104	0	12.104
2CDETGDC0	Decontaminate Set	1.00	each	HC	0	0	0	126.705	0	126.705	0	126.705
2CDETGDR0	Duct Removal	1.00	each	HC	0	0	0	25.542	0	25.542	0	25.542
2CDETGEA0	Electrical & Alarms	1.00	each	HC	0	0	0	216.341	0	216.341	0	216.341
2CDETGEE0	External Equipment Removal	1.00	each	HC	0	0	0	86.917	0	86.917	0	86.917
2CDETGPR0	Pipe Removal	1.00	each	HC	0	0	0	17.623	0	17.623	0	17.623
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	116.468	116.468	0	116.468
	٦	Total for Activ	ity 1B07G0	3500:		0	0	485.232	116.468	601.701	0	601.701

Line Item 2CDETGBR - Be Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources	Cost Element	Skill	Department	Curve	Ouantity Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	12.104.00 Dollars
	Factors 12104 Dollars				

Line Item 2CDETGDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

ces	Cost Element	Skill	Department	Curve	Quantity Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proj B Est	timating Only Linear	120.705.50 Dollars
	Factors 326231 Dollars	0.37 adi Factor	· · · · · · · · · · · · · · · · · · ·	·	
	A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	6.000.00 Dollars
	- 0000 1.11				

dollars Factors 6000

WBS No: 1BAD07 Activity ID: 1B07G03500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY

Line Item 2CDETGDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	19.542.00	Dollars
	Factors	19542 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETGEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
A5E	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	210.340.80	Dollars
Facto	s 369019 Dollars		0.57	adi Factor					
A50	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETGEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	80.917.00	Dollars
	Factors	80917 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item 2CDETGPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Page 65 of 145 6/22/00 9:31:45 PM *OFFICIAL USE ONLY*

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect E
WBS Filter 1
Activity Filter *

Baseline Devl 1BAD

Starts In FY *

Item - See Line Item Title Units - 1 lot

Unit Cost -

1B07G03500

1BAD07

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	11.623.00	Dollars
	Factors	11623 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.000.00	Dollars

Factors 6000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	63.590.53	Dollars
	Factors	63590.5 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	52.877.75	Dollars

Factors 52877.8 Dollars

WBS No: 1BADO	18 <u>Title:</u> Decommissioning Set 8 Me											
Activity ID: 1B07	Activity ID: 1B07H00500 Description: IWCP Development - Module H Cost Risk 2 Schedule Risk 2											
Line Item	Description	Quantity	Units BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost	
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost			
2CDPEHPL0	D&D H MODULE SET 8 PLANNING & ENGINEERING	1.00 eacl	h HC	877	877	25,455	71,413	0	96,868	12,025	108,893	
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	5,603	5,603	0	5,603	
	Tot	al for Activity 1E	B07H00500:		877	25,455	71,413	5,603	102,471	12,025	114,495	

Line Item 2CDPEHPL0 - D&D H MODULE SET 8 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

1								
3	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	49.41	Hours
Factors	1 Engineer		164.7 hours		0.3 adi Factor			
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	127.80	Hours
Factors	1 engineer		127.8 hours					
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	125.10	Hours
Factors	1 engineer		250.2 hours		0.5 adi. Factor			
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	350.50	Hours
Factors	4 Engineers		350.5 hours		0.25 adi. Factor			
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	144.40	Hours
Factors	2 Admin Assist.		361 hours		0.2 adi. Factor			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
Factors	2 D&D Workers (walkdowns)		40 hours					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	31.888.08	Dollars
Factors	6 planners		300 hours		63.27 Dollars per hour	0.28 adi. Factor		
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
Factors	15942 dollars		0 adi. Factor					

WBS No: 1BAD08 Rockv Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07H00500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

			uu = u.o.o	Activity Filter	*	Starts In FY *
A5H	SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.937.04 Dollars
Factors	247.1 hours	53.11 \$/hr		0.3 adi. Factor		
A5H	SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	13.666.29 Dollars
Factors	191.7 hours	71.29 \$/hr				
A5H	SUBCONTRACTED SRVS	E070 MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	13.664.67 Dollars
Factors	375.3 hours	72.82 \$/hr		0.5 adi. Factor		
A5H	SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINE	EER KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.700.24 Dollars
Factors	118.4 hours	96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safet	v ena.
A5H	SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	4.556.67 Dollars
Enstann	146 0 hours	77.6 ¢/br		0.4 odi Ecotor		

Factors 146.8 hours 77.6 \$/hr 0.4 adi. Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.348.58	Dollars
	Factors	3348.58 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.253.93	Dollars

Factors 2253.93 Dollars

Activity ID: 1B07H02500 Description: Equipment stripout - Module H Cost Risk 2 Schedule Risk

										_		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDHAC0	Remove Autoclave 135	1.00	each	HC	3.174	3.174	74.086	27.648	0	101.734	35.339	137.073
2CDEDHDC0	Decontaminate Set	1.00	each	HC	2.373	2.373	54.548	21.955	0	76.503	26.019	102.523
2CDEDHDR0	Duct Removal	1.00	each	HC	1.116	1.116	25.964	16.128	0	42.092	12.385	54.476
2CDEDHEA0	Electrical & Alarms	1.00	each	HC	9.670	9.670	226.615	61.730	0	288.345	108.095	396.441
2CDEDHEE0	External Equipment Removal	1.00	each	HC	2.028	2.028	46.956	24.172	0	71.128	22.398	93.526
2CDEDHPR0	Pipe Removal	1.00	each	HC	4.034	4.034	93.802	29.182	0	122.984	44.743	167.727
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	50.898	50.898	0	50.898
	To	tal for Activi	tv 1B07H025	500·		22 396	521 971	180 815	50 898	753 685	248 980	1 002 665

Line Item 2CDEDHAC0 - Remove Autoclave 135

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es Cost Element		Skill		Department	Curve	Ouantity	Units
750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Ho	ours
Factors 15 Hours							
750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	503.00 Ho	ours
Factors 503 Hours							
750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	50.00 Ho	ours
Factors 50 Hours							
750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	205.20 Ho	ours
Factors 228 Hours		0.9 adi. to allocate Waste Ops	foremen				
750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIG	I KB50H	B707 Eng Envir. Sftv & Quality	Linear	462.25 Ho	ours
Factors 818 Hours		0.5651 4 to 1 adj. Factor					
750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1,346.00 Ho	ours
Factors 1346 Hours							

Page 67 of 145 6/22/00 9:31:47 PM *OFFICIAL USE ONLY*

WBS No: 1BAD08 Baseline Devl Proiect **Rocky Flats Closure Project** 1BAD Activity ID: 1B07H02500 WBS Filter Becaling Cost and Books of Estimate

		Baseline Cost an	id Basis	of Estimate Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 Hours
Factors 3 Hours			,			
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	101.00 Hours
Factors 101 Hours			,			
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	10.00 Hours
Factors 10 Hours			,			
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	46.00 Hours
Factors 46 Hours			,			
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	164.00 Hours
Factors 164 Hours			,			
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	269.00 Hours
Factors 269 Hours			,			
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	27.648.16 Dollars
Factors 70071 Dollars		0.68 adj. Factor		0.58026 adi. To remv. Waste costs		

Line Item 2CDEDHDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.498.00 Hours
Factors		C120	D&D SKILLED TRADES	NDSUIT	BTOT I ACIIIIV DISDOSILIOIT	Lilledi	1.498.001110015
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
Factors	118 Hours						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sftv & Quality	Linear	360.00 Hours
Factors	275 Hours		1.30909 4 to 1 adi. Factor				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	32.00 Hours
Factors	32 Hours						
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	300.00 Hours
Factors	300 Hours						
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00 Hours
Factors	4 Hours						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	55.00 Hours
Factors	55 Hours				T.		
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	6.00 Hours
Factors	6 Hours				T.		
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	21.955.16 Dollars
Factors	46993 Dollars		0.68 adj. Factor		0.68706 adj. To remv. Waste costs		

Line Item 2CDEDHDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

WBS No: 1BAD08Activity ID: 1B07H02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY

Resources

		ACTIVITY FUIER		Starts in F i
Basis for adjustment -				
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
Factors 15 Hours				
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	540.00 Hours
Factors 540 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTC	CH. WS KB20H B707 Facilities Management	Linear	41.00 Hours
Factors 41 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GF	ROUP KB30S B707 Facility Disposition	Linear	90.90 Hours
actors 101 Hours	0.9 adi. to allocate Wast	te Ops foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHN	NOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	157.00 Hours
actors 133 Hours	1.18045 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK	K RED KB30H B707 Facility Disposition	Linear	88.00 Hours
actors 88 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
Factors 3 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	108.00 Hours
actors 108 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTC	CH. WS KB20H B707 Facilities Management	Linear	8.00 Hours
actors 8 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GF	ROUP KB30S B707 Facility Disposition	Linear	20.00 Hours
Factors 20 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHN	NOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	27.00 Hours
actors 27 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK	K RED KB30H B707 Facility Disposition	Linear	18.00 Hours
actors 18 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	16.127.56 Dollars
Factors 23717 Dollars	0.68 adj. Factor			

Line Item 2CDEDHEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element Skill			Department		Curve	Ouantity Units		
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	481.00 Hours		
Factors	481 Hours								
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.590.00 Hours		
Factors	1590 Hours								
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	290.00 Hours		
Factors	290 Hours								
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	789.30 Hours		
Factors	877 Hours		0.9 adi. to allocate Waste Ops for	oremen					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.253.25 Hours		
Factors	2055 Hours		0.60985 4 to 1 adi. Factor						
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	3.432.00 Hours		
Factors	3432 Hours								

Page 69 of 145 6/22/00 9:31:48 PM *OFFICIAL USE ONLY*

WBS No: 1BAD08 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07H02500 WBS Filter 1BAD Activity ID: Rasoline Cost and Rasis of Estimate

		baseline Cost ar	id basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	T070 MAINT	TECHS. (INSTRUMENT TEC	KB20H B707 Facilities Managemen	t Linear	90.00 Hours
Factors 90 Hours					
751 OVERTIME BASE & PRE.	C020 ELECT	RICIANS	KB10H 707 Complex Steelworkers	Linear	96.00 Hours
Factors 96 Hours					
751 OVERTIME BASE & PRE.	C120 D&D S	KILLED TRADES	KB30H B707 Facility Disposition	Linear	318.00 Hours
Factors 318 Hours					
751 OVERTIME BASE & PRE.	L060 MISSI	ON SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Managemen	t Linear	58.00 Hours
Factors 58 Hours					
751 OVERTIME BASE & PRE.	M010 FOREI	MEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	175.00 Hours
Factors 175 Hours					
751 OVERTIME BASE & PRE.	T050 RADIA	TION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Qua	lity Linear	411.00 Hours
Factors 411 Hours					
751 OVERTIME BASE & PRE.	T060 D&D H	AZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	686.00 Hours
Factors 686 Hours					
A5C SUPPLIES	0000 NONE		KB30S B707 Facility Disposition	Linear	61.730.22 Dollars
Factors 223133 Dollars	0.545	555 adi. Factor	0.50711 adi. To remy. Wa	ste costs	

0.54555 adj. Factor 0.50711 adj. To remv. Waste costs

Line Item 2CDEDHEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours	
Factors	15 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	466.00 Hours	
Factors	466 Hours		1		1	T.		
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	12.00 Hours	
Factors	12 Hours		1		1			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	76.00 Hours	
Factors	76 Hours		1					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	310.50 Hours	
Factors	524 Hours		0.59256 4 to 1 adi. Factor		1			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	776.00 Hours	
Factors	776 Hours				1			
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00lHours	
Factors	3 Hours				1		1	
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	93.00lHours	
Factors	93 Hours							
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	2.00 Hours	
Factors	2 Hours							
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	15.00lHours	
Factors	15 Hours		L		T			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	105.00lHours	
Factors	105 Hours				T		1	
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	155.00lHours	
<u>Factors</u>	155 Hours							

Page 70 of 145 6/22/00 9:31:49 PM OFFICIAL USE ONLY WBS No: 1BAD08 1B07H02500 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

Activity Filter Starts In FY 24.172.03 Dollars Linear

Factors 50253 Dollars 0.68 adi. Factor 0.70736 adj. To remv. Waste costs

0000 NONE

Line Item 2CDEDHPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

KB30S B707 Facility Disposition

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

A5C SUPPLIES

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.264.00	Hours
نے ۔	Factors	2264 Hours							
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	78.00	Hours
-	Factors	78 Hours				T		1	
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	295.20	Hours
4	Factors	328 Hours		0.9 adi. to allocate Waste Ops for	oremen	T		1	
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	599.25	Hours
ď	Factors	516 Hours		1.16134 4 to 1 adi. Factor		T		1	
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00	Hours
ŕ	Factors	133 Hours				1			
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	453.00	Hours
ŕ	Factors	453 Hours				T			
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	16.00	Hours
ŕ	Factors	16 Hours				T			
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	66.00	Hours
ŕ	Factors	66 Hours		1		1		1	
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	103.00	Hours
ď	Factors	103 Hours		1					
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00	Hours
ď	Factors	27 Hours		1		<u> </u>		1	
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	29.182.21	Dollars
	Factors	72327 Dollars		0.68 adj. Factor		0.59335 adi. To remv. Waste costs			

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	30.884.77	Dollars
	Factors	30884.8 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	20.013.52	Dollars

Factors 20013.5 Dollars

Activity ID:	1B07H03500	Description: IWCP Execution Trades - Module H	

Activity ID: 1B0	7H03500 Description: IWCP Execution Trades - Me	odule H						Cost Risk	2 Schedule R	Risk 2		
Line Item	Description	Quantity Units 1		BOE	Labor Hou		Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETHAC0	Remove Autoclave 135	1.00	each	HC	0	0	0	59.181	0	59.181	0	59.181
2CDETHDC0	Decontaminate Set	1.00	each	HC	0	0	0	135.492	0	135.492	0	135.492
2CDETHDR0	Duct Removal	1.00	each	HC	0	0	0	8.943	0	8.943	0	8.943
2CDETHEA0	Electrical & Alarms	1.00	each	HC	0	0	0	125,995	0	125,995	0	125,995
2CDETHEE0	External Equipment Removal	1.00	each	HC	0	0	0	59,181	0	59,181	0	59,181
2CDETHPR0	Pipe Removal	1.00	each	HC	0	0	0	19,465	0	19,465	0	19,465
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	97,992	97,992	0	97,992

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

Total for Activity 1B07H03500:

Activity Filter

97.992

408.258

Starts In FY

506.250

506.250

Line Item 2CDETHAC0 - Remove Autoclave 135

1BAD08

1B07H03500

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element	Skill			Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	54.181.00	Dollars
	Factors	54181 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.000.00	Dollars

5000 dollars Factors

Line Item 2CDETHDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill			Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	130.492.40	Dollars
	Factors	326231 Dollars		0.4 adi Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.000.00	Dollars

5000 Factors dollars

Line Item 2CDETHDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resource

ces	S Cost Element		Skill			Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	3.943.00	Dollars
	Factors	3943 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.000.00	Dollars

5000 dollars Factors

Line Item 2CDETHEA0 - Electrical & Alarms

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

> Page 72 of 145 6/22/00 9:31:50 PM OFFICIAL USE ONLY

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

1BAD08

1B07H03500

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	120.995.20	Dollars
	Factors	302488 Dollars		0.4 adi Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.000.00	Dollars

Factors 5000 dollars

Line Item 2CDETHEE0 - External Equipment Removal

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	54.181.00	Dollars
	Factors	54181 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.000.00	Dollars

Factors 5000 dollars Line Item 2CDETHPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title
Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	14.465.00	Dollars
	Factors	14465 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	5,000.00	Dollars

Factors 5000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resource

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	53.502.86	Dollars	
	Factors	53502.9 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	44.489.50	Dollars	
	Factors	44489.5 Dollars				·		•	·	

WBS No: 1BAD09	Title:	Decommissioning Set 9 Module J
Activity ID: 1B07J00500	Description:	IWCP Development - Module J

Page 73 of 145 6/22/00 9:31:51 PM *OFFICIAL USE ONLY*

2 Schedule Risk

Cost Risk

WBS No: 1BAD09 *Activity ID:* 1B07J00500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD

	Duscimo Oost una Dusis of Esti						Activity Filter *				Starts In FY *		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost	
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost			
2CDPEJPL0	D&D J MODULE SET 9 PLANNING & ENGINEERING	1.00	each	HC	2.549	2.549	75.404	263.439	0	338.843	25.549	364.391	
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	69.879	69.879	0	69.879	
	То	tal for Activi	ty 1B07J005	500:		2.549	75.404	263.439	69.879	408.721	25.549	434.270	

Line Item 2CDPEJPL0 - D&D J MODULE SET 9 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
Į	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	153.00 Hours
r	Factors	1 Engineer		510 hours		0.3 adi Factor		
Į	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	395.70 Hours
r	Factors	1 enaineer		395.7 hours				
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	387.40 Hours
r	Factors	1 enaineer		774.8 hours		0.5 adi. Factor		
L	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.085.70 Hours
r	Factors	4 Engineers		1085.7 hours		0.25 adi. Factor		
L	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	447.20 Hours
r	Factors	 Admin Assist. 		1118 hours		0.2 adi. Factor		
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00 Hours
r	Factors	2 D&D Workers (walkdowns)		40 hours				
Į	A52	TENERA	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	84.631.40 Dollars
г	Factors	1162.2 hours		72.82 \$/hr		1	1	
Ĺ	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	98.736.13 Dollars
г	Factors	6 planners		928.9 hours		63.27 Dollars per hour	0.28 adi. Factor	
Ĺ	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
г	Factors	49366 dollars		0 adi. Factor		1		
Ĺ	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	12.188.75 Dollars
г	Factors	765 hours		53.11 \$/hr		0.3 adi. Factor		
Ĺ	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	42.317.74 Dollars
г	Factors	593.6 hours		71.29 \$/hr		1		
Ĺ	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	11.460.11 Dollars
г	Factors	366.7 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safety	ena.
Į	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	14.104.58 Dollars
Г	Factors	454.4 hours		77.6 \$/hr		0.4 adi. Factor		
Į	A5H	SUBCONTRACTED SRVS		OTHER ENGINEERS		B707 Facility Disposition	Linear	0.00Dollars

Factors 363121 Powertool balance adi. 0 adi factor for 11.9 % reduction

Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	45.301.13	Dollars
	Factors	45301.1 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	24,577.50	Dollars

Factors 24577.5 Dollars

Activity ID: 1B07J02500 Description: Glovebox and equipment stripout - Modu Cost Risk 2 Schedule Risk 2

WBS No: 1BAD09
Activity ID: 1B07J02500

Rockv Flats Closure Project WBS Filter Baseline Cost and Basis of Estimate

Rockv Flats Closure Project WBS Filter Activity Filter *

			saseline C	ost an	a Basis of E	stimate	Acti	vity Filter *		Sto	arts In FY *	
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDJCV0	Remove Chainvevors to SR	1.00	each	HC	22.340	22.340	571.204	302.026	0	873.230	191.720	1.064.950
2CDEDJDC0	Decontaminate Set	1.00	each	HC	1.853	1.853	42.308	29.850	0	72.158	14.200	86.358
2CDEDJDR0	Duct Removal	1.00	each	HC	3.949	3.949	91.864	65.450	0	157.313	30.833	188.147
2CDEDJEA0	Electrical & Alarms	1.00	each	HC	10.822	10.822	253.537	116.933	0	370.470	85.098	455.568
2CDEDJEE0	External Equipment Removal	1.00	each	HC	1.866	1.866	43.416	37.331	0	80.747	14.572	95.319
2CDEDJIE0	GB Internal Equipment Removal	1.00	each	HC	1.148	1.148	26.921	27.298	0	54.219	9.036	63.255
2CDEDJIP0	Reduce GB In Place	1.00	each	HC	16.563	16.563	387.761	253.108	0	640.869	130.149	771.018
2CDEDJPR0	Pipe Removal	1.00	each	HC	4.583	4.583	106.528	68.151	0	174.679	35.755	210.434
2CDEDJSR0	Remove GB to Size Reduce	1.00	each	HC	4.772	4.772	137.391	75.207	0	212.598	46.114	258.712
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	768.029	768.029	0	768.029
	Tot	al for Activi	ty 1B07J025	500:		67.896	1.660.930	975.354	768.029	3.404.313	557.477	3.961.790

Line Item 2CDEDJCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	62.00	Hours
Factors	62 Hours								
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	3.836.00	Hours
Factors	3836 Hours		1						
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	139.00	Hours
Factors	1.0000		1					1	
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition		Linear	955.80	Hours
Factors			0.9 adi. to allocate Waste Ops for						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv		Linear	2.514.25	Hours
Factors			0.68564 4 to 1 adi. Factor						
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	6.221.00	Hours
Factors		0000	EL EGEDIOLANIA	1/5 / 61 /					
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	12.00	Hours
Factors 751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KDOOLI	B707 Facility Disposition		Linear	767.00	Harris
		C120	ID&D SKILLED TRADES	KDSUH	B/U/ Facility Disposition		Linear	767.00	Hours
Factors 751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	P707 Excilities Management		Linear	28.00	Hours
Factors		LUGU	IIVISSION SOF SELCTITIETTEN. WS	NDZUIT	15707 I aciilles Management	I	Lilicai	28.00	illouis
751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KD10H	776 Complex Steelworkers		Linear	864.00	Hours
Factors			3 shifts	TO TO T	9 hours/shift	16	GB equivalents	001.00	illouio
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S			Linear	432.00	Hours
Factors			3 shifts		9 hours/shift	16	GB equivalents		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	212.00	Hours
Factors	212 Hours								
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	733.00	Hours
Factors	733 Hours		1						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers		Linear	864.00	Hours
Factors	2 RCTs		3 shifts		9 hours/shift	16	GB equivalents		

Page 75 of 145 6/22/00 9:31:52 PM *OFFICIAL USE ONLY*

WBS No: 1BAD09 Rockv Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07J02500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

			Activity Filter *	Starts In FY *
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RE	D KB30H B707 Facility Disposition	Linear	1.244.00 Hours
Factors 1244 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RE	D KD10H 776 Complex Steelworkers	Linear	3.456.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	16 GB equivalents	
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	30.000.00 Dollars
Factors 625 dollars/shift	3 shifts		16 GB equivalents	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	186.741.00 Dollars
Factors 465953 Dollars	0.83 adi Factor	0.48286 adi. To remv. Wa	aste costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	85.285.00 Dollars

Factors 85285 Dollars

Line Item 2CDEDJDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
75	0 STRAIGHT TIME BASE	C120 D&D	D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00	Hours
Facto	ors 32 Hours				T	1		
75	0 STRAIGHT TIME BASE	M010 FOR	REMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00	Hours
Facto	ors 118 Hours	1			T	I		
75	0 STRAIGHT TIME BASE	T050 RAD	DIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	291.25	Hours
Facto	ors 212 Hours	1.3	.37382 4 to 1 adi. Factor		T			
75	0 STRAIGHT TIME BASE	T060 D&D	D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.133.00	Hours
Facto					T			
75	· · · · · · · · · · · · · · · · · · ·	C120 D&D	D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00	Hours
Facto					I			
75		M010 FOR	REMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00	Hours
Facto				1/0=011	D-0- F		10.00	
75		T050 RAD	DIATION CONTROL TECHNOLIGI	KB50H	B/0/ End Envir. Sttv & Quality	Linear	42.00	Hours
Facto 75		T060 D&F	DUAZ DEDUG TEGU / DIGK DED	KDOOLI	D707 F !!!+ : Di!+!	Linean	007.00	
		1060 10&L	D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	227.00	Hours
Facto A5	7.0	0000 NON	NE	KB306	B707 Facility Disposition	Linear	29.850.12	Dollare
Facto	05004 D "	3.0		NDSUS	IDTOT I ACIIILY DISDOSILION	Lilledi	29.000.12	DUIIdIS

Line Item 2CDEDJDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

_			
R	esc	ur	ces

ces		Cost Element	Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours						

WBS No: 1BAD09 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07J02500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate**

	Daseille Cost allu	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.661.00 Hours
Factors 1661 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS 1	KB20H B707 Facilities Management	Linear	168.00 Hours
Factors 168 Hours			Г	
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	271.80 Hours
Factors 302 Hours	0.9 adi. to allocate Waste Ops fore	emen	T.	
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	559.75 Hours
Factors 752 Hours	0.74435 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	578.00 Hours
Factors 578 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
Factors 3 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	332.00 Hours
Factors 332 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS 1	KB20H B707 Facilities Management	Linear	34.00 Hours
Factors 34 Hours				
751 OVERTIME BASE & PRE.	M010 IFOREMEN / TEAM LEADS / GROUP I	KB30S B707 Facility Disposition	Linear	60.00lHours
Factors 60 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	150.00lHours
Factors 150 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	116.00 Hours
Factors 116 Hours				
A5C SUPPLIES		KB30S B707 Facility Disposition	Linear	65,449.65 Dollars
Factors 78855 Dollars	0.83 adj Factor			

Line Item 2CDEDJEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Dabi	s for adjustment -							
s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	609.00	Hours
Factors	609 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.723.00	Hours
Factors	1723 Hours							
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	330.00	Hours
Factors	330 Hours							
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	882.00	Hours
Factors	980 Hours		0.9 adi. to allocate Waste Ops for	oremen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.393.75	Hours
Factors	2214 Hours		0.62952 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	3.852.00	Hours
Factors	3852 Hours							
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00	Hours
Factors	90 Hours							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	122.00	Hours
Factors	122 Hours							

Page 77 of 145 6/22/00 9:31:54 PM OFFICIAL USE ONLY WBS No: 1BAD09 Rocky Flats Closure Proiect Proiect Baseline Devl
Activity ID: 1B07J02500 Reseline Cost and Resis of Estimate WBS Filter 1BAD

		Baseline Cost an	a Basis	of Estimate Activity Fil	ilter *	Starts In FY *
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	345.00 Hours
Factors 345 Hours						
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	66.00 Hours
Factors 66 Hours						
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	196.00 Hours
Factors 196 Hours						
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	443.00 Hours
Factors 443 Hours		T		T		
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	770.00 Hours
Factors 770 Hours		T		T		
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	116.932.80 Dollars
751 OVERTIME BASE & PRE. Factors 770 Hours						

Factors 245702 Dollars 0.68755 adj Factor 0.69219 adj. To remv. Waste costs

Line Item 2CDEDJEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
Į	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours							
Į	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	271.00	Hours
ı	Factors	271 Hours	1						
Į	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	95.00	Hours
ſ	Factors	95 Hours		1					
Į	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	150.30	Hours
ſ	Factors	167 Hours		0.9 adi. to allocate Waste Ops for					
ļ	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	254.75	Hours
ſ	Factors	363 Hours		0.70179 4 to 1 adi. Factor					
ļ		STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	748.00	Hours
ſ	Factors	748 Hours	0000	EL EGEDIOLANO	1/5 / 61 /				
ļ	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00	Hours
[Factors 751	3 Hours OVERTIME BASE & PRE.	0400	D&D SKILLED TRADES	KDOOLI	B707 Facility Disposition	Linner	54.00	Hours
ļ		54 Hours	C120	ID&D SKILLED TRADES	KBSUH	B/U/ Facility Disposition	Linear	54.00	HOUIS
ſ	Factors 751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	P707 Facilities Management	Linear	10.00	Hours
ı	Factors	19 Hours	LUUU	INIOSION SOL SI ECH (LETTON: WS	IND2011	DTOT I aclilles Management	Lilleal	19.00	ilouis
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	33 00	Hours
	Factors	33 Hours				TELOT I GOING ELOCOMOTI			
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	73.00	Hours
	Factors	73 Hours							
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	150.00	Hours
	Factors	150 Hours							
Į	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	37.330.91	Dollars
	Fastore	44077 Dollars		0.93 adi Eactor					

Factors 44977 Dollars 0.83 adj Factor

Line Item 2CDEDJIE0 - GB Internal Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Page 78 of 145 6/22/00 9:31:54 PM *OFFICIAL USE ONLY*

Proiect **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

Baseline Devl 1BAD WBS Filter Activity Filter

Starts In FY *

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD09

1B07J02500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

Г							
es	Cost Element		Skill		Department	Curve	Ouantity Units
Į	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
r	Factors 15 Hours						
Į	750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	321.00 Hours
r	Factors 321 Hours	1					
L	750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	15.00 Hours
r	Factors 15 Hours	1					
L	750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	78.30 Hours
r	Factors 87 Hours	1	0.9 adi. to allocate Waste Ops for	oremen			
L	750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	164.50 Hours
r	Factors 316 Hours	1	0.52057 4 to 1 adi. Factor				
L	750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	337.00 Hours
r	Factors 337 Hours	1					
L	751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 Hours
r	Factors 3 Hours						
L	751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	64.00 Hours
r	Factors 64 Hours						
L	751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	3.00 Hours
r	Factors 3 Hours						
L	751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	17.00 Hours
r	Factors 17 Hours						
L	751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	63.00 Hours
r	Factors 63 Hours						
Į	751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	67.00 Hours
r	Factors 67 Hours						
Ĺ	A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	22.648.21 Dollars
r	Factors 27287 Dollars	ı	0.83 adi Factor				
L	A5H SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	4.650.00 Dollars
	Enstant AGEO Dollars						

Factors 4650 Dollars

Line Item 2CDEDJIP0 - Reduce GB In Place

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	111.00	Hours
	Factors	111 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	3.789.00	Hours
	Factors	3789 Hours							

Page 79 of 145 6/22/00 9:31:55 PM OFFICIAL USE ONLY WBS No: 1BAD09 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07J02500 Baseline Cost and Basis of Estimate 1BAD

	Daseille Cost	and basis of Estimate	Activity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. W	/S KB20H B707 Facilities Manageme	nt Linear	269.00 Hours
Factors 269 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	P KB30S B707 Facility Disposition	Linear	1.249.20 Hours
Factors 1388 Hours	0.9 adi. to allocate Waste Op	s foremen	T	
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Ena Envir. Sftv & Qu	ality Linear	2.376.75 Hours
Factors 3972 Hours	0.59838 4 to 1 adi. Factor		T	
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK REI	D KB30H B707 Facility Disposition	Linear	5.718.00 Hours
Factors 5718 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	22.00 Hours
Factors 22 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	758.00 Hours
Factors 758 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. W	/S KB20H B707 Facilities Manageme	nt Linear	54.00 Hours
Factors 54 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	P KB30S B707 Facility Disposition	Linear	278.00 Hours
Factors 278 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Ena Envir. Sftv & Qu	ality Linear	794.00 Hours
Factors 794 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK REI	D KB30H B707 Facility Disposition	Linear	1.144.00 Hours
Factors 1144 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	169.095.10 Dollars
Factors 444693 Dollars	0.83 adj Factor	0.45813 adj. To remv. W	aste costs	
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	84,013.00 Dollars
Factors 84013 Dollars				

Line Item 2CDEDJPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

basis for adjustment -									
s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	2.592.00	Hours
F_{i}	actors	2592 Hours							
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	89.00	Hours
F_{i}	actors	89 Hours							
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	334.80	Hours
F_{i}	actors	372 Hours		0.9 adi. to allocate Waste Ops for	oremen				
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	681.25	Hours
F_{i}	actors	581 Hours		1.17255 4 to 1 adi. Factor					
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	133.00	Hours
F_{i}	actors	133 Hours							
	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	518.00	Hours
F_{i}	actors	518 Hours							
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	18.00	Hours
F_{i}	actors	18 Hours							
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	74.00	Hours
F	actors	74 Hours							

Page 80 of 145 6/22/00 9:31:56 PM *OFFICIAL USE ONLY*

WBS No:1BAD09Rocky Flats Closure ProiectProiectBaseline DevlActivity ID:1B07J02500Baseline Cost and Basis of EstimateWBS Filter1BAD

					Activity Filter	*	Starts In FY *
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	116.00 Hours
Factors	116 Hours						
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00 Hours
Factors	27 Hours						
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	68.151.30 Dollars
Factors	82110 Dollars		0.83 adi Factor				

Line Item 2CDEDJSR0 - Remove GB to Size Reduce

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department		Curve	Ouantity	Units
Ĺ	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	19.00	Hours
Г	Factors	19 Hours	1	1						
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	510.00	Hours
Г	Factors	510 Hours		1	I					
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	21.00	Hours
Г	Factors	21 Hours	1							
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition		Linear	163.80	Hours
ſ	Factors	182 Hours		0.9 adi. to allocate Waste Ops f		L				
L	750	STRAIGHT TIME BASE	T050		KB50H	B707 Eng Envir. Sttv & Quality		Linear	282.25	Hours
ſ	Factors	396 Hours	T000	0.71275 4 to 1 adi. Factor	I/Dool I	D707 E 32 D: W			040.00	
L	750	STRAIGHT TIME BASE	1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	619.00	Hours
ſ	Factors 751	619 Hours OVERTIME BASE & PRE.	C020	ELECTRICIANS	KD40LL	707 Complex Steelworkers		Linear	4.00	Hours
L	Factors	4 Hours	CUZU	IELECTRICIANS	KBIUH	707 Comblex Steetworkers		Lilleal	4.001	nouis
ſ	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	102.00	Hours
	Factors	102 Hours					•		10=100	
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	4.00	Hours
	Factors	4 Hours								
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KD10H	776 Complex Steelworkers		Linear	432.00	Hours
	Factors	2 waste inspectors		3 shifts	ı	9 hours/shift	8	GB equivalents		
Ĺ	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	K399S	Building 776 Project		Linear	216.00	Hours
г	Factors	1 foreman		3 shifts	ı	9 hours/shift	8	GB equivalents		
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	36.00	Hours
Г	Factors	36 Hours		1						
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	79.00	Hours
ſ	Factors	79 Hours	T050	DADIATION CONTROL TECHNOLOG	I/D40II	7700 1 0: 1 1			400.00	
L	751	OVERTIME BASE & PRE. 2 RCTs	1050	RADIATION CONTROL TECHNOLIGI 3 shifts	KD10H	9 hours/shift	8	Linear GB equivalents	432.00	Hours
ſ	Factors 751	OVERTIME BASE & PRE.	TOGO	D&D HAZ REDUC TECH / RISK RED	KBSUH	B707 Facility Disposition		Linear	124.00	Houro
L	Factors	124 Hours	1000	ID&D HAZ REDUC TECH / RISK RED	KDSUH	B/0/ Facility Disposition		Lilleal	124.001	nouis
ſ	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	1.728.00	Hours
L	Factors	8 D&D workers	1000	3 shifts		9 hours/shift	8	GB equivalents	1.720.001	
ſ	A5C	SUPPLIES	0000	NONE	K399S	Building 776 Project		Linear	15.000.00	Dollars
	Factors			3 shifts			8	GB equivalents	. 0.000.001	
		. =								

Page 81 of 145 6/22/00 9:31:56 PM *OFFICIAL USE ONLY*

WBS No: 1BAD09 Activity ID: 1B07J02500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

					Activity Filter		Starts In FY
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	46.823.62 Dollars
Factors	56414 Dollars		0.83 adi Factor				
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	13.383.00 Dollars

Factors 13383 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	514.378.60	Dollars	
	Factors	514379 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	253,650,40	Dollars	

Factors 253650 Dollars

Description: IWCP Execution Trades - Module J

Cost Risk

2 Schedule Risk

ACTIVITY ID. 100	Bescription. IVOI Execution Hades IVI	Judic 0			Cost Risk Z Schedule Risk Z							
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETJDC0	Decontaminate Set	1.00	each	HC	0	0	0	137.401	0	137.401	0	137.401
2CDETJDR0	Duct Removal	1.00	each	HC	0	0	0	21.971	0	21.971	0	21.971
2CDETJEA0	Electrical & Alarms	1.00	each	HC	0	0	0	183.830	0	183.830	0	183.830
2CDETJEE0	External Equipment Removal	1.00	each	HC	0	0	0	30.494	0	30.494	0	30.494
2CDETJPR0	Pipe Removal	1.00	each	HC	0	0	0	23.422	0	23.422	0	23.422
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	57.137	57.137	0	57.137
	Tot	al for Activi	ty 1B07J035	00:		0	0	397.118	57.137	454.255	0	454.255

Line Item 2CDETJDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element	Skill	Department	Curve	Ouantity Units
	A5B	CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	130.401.20 Dollars
	Factors	246040 Dollars	0.53 adi Factor			
	A5C	SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	7.000.00 Dollars
	Factors	7000 dollars				

Line Item 2CDETJDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	14.971.00	Dollars
	Factors	14971 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars
	Factors	7000 dollars							

WBS No: 1BAD09 Activity ID: 1B07J03500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY

Line Item 2CDETJEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	176.829.70	Dollars
	Factors	333641 Dollars		0.53	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

Factors 7000 dollars

Line Item 2CDETJEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	23.493.84	Dollars
Factor	s 44328 Dollars		0.53	adi Factor					
A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

Factors 7000 dollars

Line Item 2CDETJPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	16.422.00	Dollars
Factors	16422 Dollars							
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

Factors 7000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19.007.03	Dollars
-	Factors	19007.0 Dollars							

Page 83 of 145 6/22/00 9:31:57 PM *OFFICIAL USE ONLY*

WBS No: 1BAD09 Rockv Flats Closure Project Project Baseline Devl
Activity ID: 1B07J03500 Baseline Cost and Basis of Estimate WBS Filter 1BAD

ESC ESCALATION 0000 NONE ZDEPT No Department Linear 38.129.77 Dollars

Factors 38129.8 Dollars

WBS No: 1BAD1	0 Title: Decommissioning Set 10 M	/lodule K										
Activity ID: 1B07	7K00500 Description: IWCP Development - Module	e K						Cost Risk	2 Schedule F	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEKPL0	2CDPEKPL0 D&D K MODULE SET 10 PLANNING & ENGINEERING		each	НС	2.859	2.859	84.662	248.871	0	333.532	29.812	363.344
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	64.897	64.897	0	64.897
	Tot	al for Activi	ty 1B07K00	500:		2.859	84.662	248.871	64.897	398.429	29.812	428.241

Line Item 2CDPEKPL0 - D&D K MODULE SET 10 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	172.20	Hours
	Factors	1 Engineer		574 hours		0.3 adi Factor			
	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	445.40	Hours
	Factors	1 enaineer		445.4 hours		1			
	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	436.00	Hours
	Factors	1 enaineer		872 hours		0.5 adi. Factor			
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.222.00	Hours
	Factors	4 Engineers		1222 hours		0.25 adi. Factor			1
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	503.20	Hours
	Factors	2 Admin Assist.		1258 hours		0.2 adi. Factor			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
	Factors			40 hours					
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	*	Linear	111.130.00	Dollars
	Factors	6 planners		1045.5 hours		63.27 Dollars per hour	0.28 adi. Factor		
	A5C		0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
	Factors	55563 dollars		0 adi. Factor		T			L
	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	13.719.91	Dollars
	Factors	861.1 hours		53.11 \$/hr		0.3 adi. Factor			
	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	47.621.72	Dollars
	Factors	668 hours		71.29 \$/hr		T			
	A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	47.624.28	Dollars
	Factors	1308 hours		72.82 \$/hr		0.5 adi. Factor			L
	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S		Linear	12.900.83	Dollars
	Factors	412.8 hours		96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safety		L 1
	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	15.873.86	Dollars
	Factors	511.4 hours	E400	77.6 \$/hr	LADOOC	0.4 adi. Factor			ь
	A5H	SUBCONTRACTED SRVS		OTHER ENGINEERS		B707 Facility Disposition	Linear	0.00	Dollars

Factors 442711 Powertool balance adj. 0 adj factor for 11.9 % reduction

Line Item SYS - Contingency And Escalation

BOE

_						
Resources	Cost Element	Skill	Department	Curve	Ouantity	Units

WBS No:1BAD10Rockv Flats Closure ProjectProjectBaseline DevlActivity ID:1B07K00500Baseline Cost and Basis of EstimateWBS Filter1BAD

			Activity Filter	Starts in F i
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	42.095.07 Dollars
Factors 42095.1 Dollars				
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	22 801 71 Dollars

Factors 22801.7 Dollars

Activity ID: 1B07K02500 Description: Glovebox and equipment stripout - Modu Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
2CDEDKCV0	Remove Chainvevors to SR	1.00 €	each	HC	25.218	25.218	655.131	282.382	0	937.513	213.670	1.151.183
2CDEDKDC0	Decontaminate Set	1.00 e	each	НС	1.252	1.252	28.804	17.102	0	45.906	9.394	55.301
2CDEDKDR0	Duct Removal	1.00 €	each	HC	2.524	2.524	58.690	36.811	0	95.501	19.142	114.642
2CDEDKEA0	Electrical & Alarms	1.00 €	each	HC	10.143	10.143	237.762	110.136	0	347.898	77.546	425.444
2CDEDKEE0	External Equipment Removal	1.00 €	each	HC	508	508	11.886	11.407	0	23.292	3.876	27.169
2CDEDKIE0	GB Internal Equipment Removal	1.00 €	each	HC	3.048	3.048	71.453	61.141	0	132.594	23.304	155.898
2CDEDKIP0	Reduce GB In Place	1.00 €	each	HC	9.815	9.815	231.855	220.062	0	451.917	75.619	527.536
2CDEDKPR0	Pipe Removal	1.00 €	each	HC	4.422	4.422	102.798	57.065	0	159.863	33.527	193.390
2CDEDKSR0	Remove GB to Size Reduce	1.00 €	each	HC	16.990	16.990	419.754	290.072	0	709.826	136.902	846.727
SYS	Contingency And Escalation	1.00 €	ea	EE	0	0	0	0	789.025	789.025	0	789.025
	Tot	tal for Activity	/ 1B07K025	500:		73.921	1.818.133	1.086.177	789.025	3.693.335	592.980	4.286.315

Line Item 2CDEDKCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title
Units - 1 lot

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

	G PI	et in		- C	
es	Cost Element	Skill	Department Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	53.00 Hours
Factors					
750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	4.184.00 Hours
Factors	4184 Hours				
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, V	VS KB20H B707 Facilities Management	Linear	156.00 Hours
Factors	156 Hours				
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROU	JP KB30S B707 Facility Disposition	Linear	1.092.60 Hours
Factors	1214 Hours	0.9 adi. to allocate Waste Or	ns foremen	*	
750	STRAIGHT TIME BASE		IGI KB50H B707 Eng Envir, Sftv & Quality	Linear	2.659.75 Hours
Factors		0.67233 4 to 1 adi. Factor	O TOO OT DIVI ENGLISH ON A GOUNT		2.000.10110010
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RE	ED KB30H B707 Facility Disposition	Linear	6.491.00 Hours
Factors		TOOL DAD TIME REDGE TECHT MORNE	TO THE PROPERTY OF THE PROPERT	Lincal	0.431.001110013
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	11.00 Hours
		1 CO20 ILLECTRICIANS	RB1011 1707 Colliblex Steelwolkers	Lilleal	11.00ii louis
Factors	110000	0400 000 000 100	KDOOLL DZOZ E IIV D' IV	1.	007.0011
751	OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	837.00 Hours
Factors		T			
751	OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. V	VS KB20H B707 Facilities Management	Linear	31.00lHours
Factors	31 Hours				
751	OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. V	VS KD10H 776 Complex Steelworkers	Linear	1.134.00 Hours
Factors	2 waste inspectors	3 shifts	9 hours/shift	21 GB equivale	nts
751	OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROU	IP K399S Building 776 Project	Linear	567.00 Hours
Factors	1 foreman	3 shifts	9 hours/shift	21 GB equivale	nts
Factors	1 foreman	3 shifts	9 hours/shift	21 GB equivale	nts

Page 85 of 145 6/22/00 9:31:59 PM *OFFICIAL USE ONLY*

WBS No:1BAD10Rocky Flats Closure ProiectProiectBaseline DevlActivity ID:1B07K02500Baseline Cost and Basis of EstimateWBS Filter1BAD

		baseline Cost and	u basis	Activity Filter	*		Starts In FY	*
751 OVERTIME BASE & PRE.	M010 FO	DREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	243.00	Hours
Factors 243 Hours								
751 OVERTIME BASE & PRE.	T050 RA	ADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	791.00	Hours
Factors 791 Hours				T.	1			
751 OVERTIME BASE & PRE.	T050 RA	ADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers		Linear	1.134.00	Hours
Factors 2 RCTs	3	3 shifts		9 hours/shift	21	GB equivalents	i ,	
751 OVERTIME BASE & PRE.	T060 D&	&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	1.298.00	Hours
Factors 1298 Hours	, ,							
751 OVERTIME BASE & PRE.	T060 D&	&D HAZ REDUC TECH / RISK RED	KD10H	776 Complex Steelworkers		Linear	4.536.00	Hours
Factors 8 D&D workers	3	3 shifts		9 hours/shift	21	GB equivalents	i ,	i i
A5C SUPPLIES	0000 NO	ONE	K399S	Building 776 Project		Linear	39.375.00	Dollars
Factors 625 dollars/shift	3	3 shifts			21	GB equivalents	i ,	i i
A5C SUPPLIES	0000 NO	ONE	KB30S	B707 Facility Disposition		Linear	152.017.00	Dollars
Factors 495857 Dollars	0	0.64942 adi Factor		0.47208 adi. To remv. Waste costs				i i
A5H SUBCONTRACTED SRVS	E130 OT	THER ENGINEERS	KB30S	B707 Facility Disposition		Linear	90.990.00	Dollars
Factors 90990 Dollars								

Line Item 2CDEDKDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

3	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00 Hours
Factors	32 Hours						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	118.00 Hours
Factors	118 Hours	1					
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	190.00 Hours
Factors	141 Hours		1.34752 4 to 1 adi. Factor				
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	728.00 Hours
Factors	728 Hours	1					
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00 Hours
Factors	6 Hours	1					
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00 Hours
Factors	4 Hours						
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	28.00 Hours
Factors	28 Hours						
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	146.00 Hours
Factors	146 Hours						
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	17.102.16 Dollars
Factors	23753 Dollars		0.72 adi Factor				

Line Item 2CDEDKDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Page 86 of 145 6/22/00 9:32:00 PM *OFFICIAL USE ONLY*

WBS No: 1BAD10 1B07K02500 Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter Baseline Devl 1BAD

Starts In FY *

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Ouantity Units
L	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
4	Factors 15 Hours	1					
L	750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.087.00 Hours
ŕ	Factors 1087 Hours	ı	1				
L	750 STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	119.00lHours
ŕ	Factors 119 Hours	1					
L	750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	180.90lHours
ľ	Factors 201 Hours	T050	0.9 adi. to allocate Waste Ops fo		D707 F F : 00 0 0 15	1.	054.0511
L	750 STRAIGHT TIME BASE Factors 439 Hours	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B/U/ End Envir. Sftv & Quality	Linear	354.25 Hours
ľ	Factors 439 Hours 750 STRAIGHT TIME BASE	TOGO	0.80695 4 to 1 adi. Factor D&D HAZ REDUC TECH / RISK RED	KBSUL	B707 Facility Disposition	Linear	330.00 Hours
L	Factors 330 Hours	1000	ID&D HAZ REDUC TECH / RISK RED	KBSUH	B707 Facility Disposition	Lilleai	330.00iHouis
ſ	751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00 Hours
	Factors 3 Hours	0020	ILLEO TRIONARO	IND IVIT	TOT COMBIEN CICCIWOMCIS	Lincal	0.001110413
ſ	751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	217.00 Hours
_	Factors 217 Hours						
L	751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	24.00 Hours
į.	Factors 24 Hours	ı					
L	751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	40.00 Hours
ď	Factors 40 Hours						
L	751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	88.00lHours
ŕ	Factors 88 Hours	1					
L	751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	66.00lHours
ŕ	Factors 66 Hours		lugue I	1/2000	D=0= = D1		00.040.70
L	A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	36.810.72 Dollars
4	Factors 51126 Dollars		0.72 adi Factor				

Line Item 2CDEDKEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity Units	
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	543.00 Hours	
	Factors	543 Hours							_
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1,627.00 Hours	
	Factors	1627 Hours							_
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	296.00 Hours	
	Factors	296 Hours							_
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	836.10 Hours	
	Factors	929 Hours		0.9 adi. to allocate Waste Ops for	oremen				_
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.310.50 Hours	
	Factors	2113 Hours		0.62021 4 to 1 adi. Factor					

Page 87 of 145 6/22/00 9:32:01 PM OFFICIAL USE ONLY WBS No:1BAD10Rocky Flats Closure ProjectProjectBaseline DevlActivity ID:1B07K02500Baseline Cost and Basis of EstimateWBS Filter1BAD

		Baseline Cost an	a Basis	Or Estimate Activity Filter *		Starts In FY *
750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	3.615.00 Hours
Factors 3615 Hours						
750 STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours	1					
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	109.00 Hours
Factors 109 Hours	1					
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	325.00 Hours
Factors 325 Hours	1					
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	59.00 Hours
Factors 59 Hours		T				
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	186.00 Hours
Factors 186 Hours		T				
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	423.00 Hours
Factors 423 Hours						
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	723.00 Hours
Factors 723 Hours						
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	110.135.80 Dollars
Factors 232133 Dollars		0.72 adi Factor		0.65896 adj. To remv. Waste costs		

Line Item 2CDEDKEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element	Skill	Department	Curve	Quantity Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
Factors	15 Hours				
750	STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	149.00 Hours
Factors	149 Hours				
750	STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	3.00 Hours
Factors	3 Hours			T	
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	29.00 Hours
Factors	29 Hours				
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	73.25 Hours
Factors	130 Hours	0.56346 4 to 1 adi. Factor			
750	STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	144.00 Hours
Factors	144 Hours				
751	OVERTIME BASE & PRE.	C020 IELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00lHours
Factors	3 Hours	1			
751	OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	30.00lHours
Factors	30 Hours				
751	OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	1.00lHours
Factors					
751	OVERTIME BASE & PRE.	I M010 IFOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	6.00lHours
Factors		T			
751	OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	26.00lHours
<u>Factors</u>	26 Hours				

Page 88 of 145 6/22/00 9:32:01 PM *OFFICIAL USE ONLY*

Baseline Devl Proiect **Rocky Flats Closure Project** 1B07K02500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Activity Filler	Linear	29.00 Hours
Factors	29 Hours						
A5C	SUPPLIES	0000	NONE	KB30S B707 Facility Disposition		Linear	11.406.96 Dollars

Factors 15843 Dollars 0.72 adj Factor

Line Item 2CDEDKIE0 - GB Internal Equipment Removal

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

1BAD10

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
Fa	actors 15 Hours				
	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	690.00 Hours
Fa	actors 690 Hours				
L	750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. W	S KB20H B707 Facilities Management	Linear	66.00 Hours
Fa	actors 66 Hours				
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	210.60 Hours
Fa	actors 234 Hours	0.9 adi. to allocate Waste Op	s foremen		
L.	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Eng Envir. Sftv & Quality	Linear	434.75 Hours
Fa	actors 858 Hours	0.50670 4 to 1 adi. Factor			
	750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK REI	D KB30H B707 Facility Disposition	Linear	1.049.00 Hours
Fa	uctors 1049 Hours				
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
Fa	actors 3 Hours				1
L	751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	138.00 Hours
	uctors 138 Hours				
L	751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. W	S KB20H B707 Facilities Management	Linear	13.00 Hours
	uctors 13 Hours	T			
<u> </u>	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	47.00 Hours
	actors 47 Hours				
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIC	GI KB50H B707 Eng Envir. Sftv & Quality	Linear	172.00 Hours
	actors 172 Hours				242.22
	751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK REI	D KB30H B707 Facility Disposition	Linear	210.00 Hours
	actors 210 Hours	Lacca NOVE	1/D000 D=0= F III D1 III		10.000.045.11
	A5C SUPPLIES	1 0000 NONE	KB30S B707 Facility Disposition	Linear	48.633.84 Dollars
	actors 67547 Dollars	0.72 adi Factor	KD000 D707 F 35 D: 35		40 507 00 B #
	A5H SUBCONTRACTED SRVS	l E130 lOTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	12.507.00 Dollars

Factors 12507 Dollars Line Item 2CDEDKIP0 - Reduce GB In Place

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

6/22/00 9:32:02 PM Page 89 of 145 OFFICIAL USE ONLY

Andreien Filen

Canada In EV

WBS No: 1BAD10 Activity ID: 1B07K02500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY

Resources

		Activity Filter	r ^	Starts In FY
Basis for adjustment -				
Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	15.00 Hours
Factors 15 Hours				
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.062.00 Hours
Factors 1062 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH	I. WS KB20H B707 Facilities Management	Linear	358.00 Hours
Factors 358 Hours				
750 STRAIGHT TIME BASE		OUP KB30S B707 Facility Disposition	Linear	712.80 Hours
Factors 792 Hours	0.9 adi. to allocate Waste			
750 STRAIGHT TIME BASE		DLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	1.334.00 Hours
Factors 3794 Hours	0.35161 4 to 1 adi. Factor			1
750 STRAIGHT TIME BASE	T060 ID&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	4.274.00 Hours
Factors 4274 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
Factors 3 Hours	O400 DAD OWLLED TRADEO	MOONI DIGITE III Di III		040.0011
751 OVERTIME BASE & PRE.	C120 ID&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	212.00 Hours
Factors 212 Hours	L060 MISSION SUP SPEC II (FLTTCH	I. WS KB20H B707 Facilities Management	Linner	72.00 Hours
751 OVERTIME BASE & PRE. Factors 72 Hours	I LU60 IMISSION SUP SPEC II (FLTTCH	I. WS KB20H B707 Facilities Management	Linear	/2.00iHours
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GRO	OUP KB30S B707 Facility Disposition	Linear	158.00 Hours
Cactors 158 Hours	I WOTO IFOREWEN/ TEAW LEADS/ GRO	DUF KB303 B707 FACIIIV DISDUSITION	Lilledi	136.00Hours
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNO	DLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	759.00 Hours
Factors 759 Hours	TOO IN TOUR THOU	ZEIGI TROOTI DIO ETIA ETIVII. OTTY & SAGIITY	Elitodi	700.000110010
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK I	RED KB30H B707 Facility Disposition	Linear	855.00 Hours
Factors 855 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	161.964.00 Dollars
Factors 363839 Dollars	0.72 adi Factor	0.61827 adi. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	58.098.00 Dollars
Factors 58098 Dollars	• • •	· · · · · · · · · · · · · · · · · · ·	•	· ·

Factors 58098 Dollars

Line Item 2CDEDKPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	2.496.00 Hours
Factors 2496 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLT	TCH. WS KB20H B707 Facilities Management	Linear	86.00 Hours
Factors 86 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS /	GROUP KB30S B707 Facility Disposition	Linear	323.10 Hours
Factors 359 Hours	0.9 adi. to allocate W	/aste Ops foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TEC	CHNOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	657.25 Hours
Factors 562 Hours	1.16948 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / R	RISK RED KB30H B707 Facility Disposition	Linear	133.00 Hours
Factors 133 Hours				

Page 90 of 145 6/22/00 9:32:02 PM *OFFICIAL USE ONLY*

Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

		Buseline Cost ai	ia Basis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	499.00 Hours
Factors 499 Hours						
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	17.00 Hours
Factors 17 Hours						
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	72.00 Hours
Factors 72 Hours						
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	112.00 Hours
Factors 112 Hours						
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	27.00 Hours
Factors 27 Hours						
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	57.065.04 Dollars

Factors 79257 Dollars 0.72 adj Factor

Line Item 2CDEDKSR0 - Remove GB to Size Reduce

1BAD10

1B07K02500

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department		Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	69.00	Hours
1	Factors	69 Hours			T					
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	3.624.00	Hours
4	Factors	3624 Hours	1							
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	222.00	Hours
į	Factors	222 Hours			ı					
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition		Linear	1.085.40	Hours
į,	Factors	1206 Hours		0.9 adi. to allocate Waste Ops f					1	
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	2.103.50	Hours
ď	Factors	3285 Hours		0.64034 4 to 1 adi. Factor						
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	4.790.00	Hours
4	Factors	4790 Hours								
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers		Linear	14.00	Hours
4	Factors	14 Hours	0.00	Don 0/// ED TD 1050	1/20011	D=0= E D:				
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition		Linear	725.00	Hours
ď	Factors	725 Hours	1.000	MICCION CUE OREO II (EL TTOLL MO	KDOOLI	D707 E 390 M			44.00	
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B/U/ Facilities Management		Linear	44.00	Hours
ď	Factors 751	44 Hours OVERTIME BASE & PRE.	1.000	MICCION CUE CEC II /EL TTOLL MC	I/D40LL	770 O		Linear	378.00	Harris
L			L060	MISSION SUP SPEC II (FLTTCH, WS 3 shifts	KD10H	9 hours/shift	7	GB equivalents		Hours
ď	Factors 751	2 waste inspectors OVERTIME BASE & PRE.	M010		Kanne	Building 776 Project		Linear	189.00	Hours
L	Factors	1 foreman	IVIOTO	3 shifts	KSSSS	9 hours/shift	7	GB equivalents		Houis
ſ	751	OVERTIME BASE & PRE.	MO10	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	241.00	Houre
	Factors	241 Hours	INIOTO	II CILLINEIV TEAM LEADS / CINCOI	NDSUS	Dror Facility Disposition		Lilleai	241.001	ilouis
ſ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir Sfty & Quality		Linear	657.00	Hours
1	Factors	657 Hours	1000	III. LOUINICE TECHNOLIST	1,00011	is or and any in some or sound	"	LIIIOM	557.001	IOMIO
ſ	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KD10H	776 Complex Steelworkers		Linear	378.00	Hours
1	Factors	2 RCTs		3 shifts		9 hours/shift	7	GB equivalents		
-										-

Page 91 of 145 6/22/00 9:32:03 PM OFFICIAL USE ONLY WBS No: 1BAD10 Proiect Baseline Devl **Rocky Flats Closure Project** Activity ID: 1B07K02500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

		Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	958.00 Hours
Factors 958 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KD10H 776 Complex Steelworkers	Linear	1.512.00 Hours
Factors 8 D&D workers	3 shifts	9 hours/shift	7 GB equivalent	s
A5C SUPPLIES	0000 NONE	K399S Building 776 Project	Linear	13.125.00 Dollars
Factors 625 dollars/shift	3 shifts		7 GB equivalent	s
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	203.490.70 Dollars
Factors 393737 Dollars	0.72 adi Factor	0.71780 adi. To remv. Waste costs		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	73.456.00 Dollars

Factors 73456 Dollars

Line Item SYS - Contingency And Escalation

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	502.927.40	Dollars
	Factors	502927 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	286.097.60	Dollars

Factors 286098 Dollars

Activity ID: 180	Activity ID: 180/R03500 Description: IWCP Execution Trades - Module K Cost Risk 2 Schedule Risk 2													
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost		
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost				
2CDETKDC0	Decontaminate Set	1.00	each	HC	0	0	0	113.361	0	113.361	0	113.361		
2CDETKDR0	Duct Removal	1.00	each	HC	0	0	0	16.425	0	16.425	0	16.425		
2CDETKEA0	Electrical & Alarms	1.00	each	HC	0	0	0	221.139	0	221.139	0	221.139		
2CDETKEE0	External Equipment Removal	1.00	each	HC	0	0	0	18.117	0	18.117	0	18.117		
2CDETKPR0	Pipe Removal	1.00	each	HC	0	0	0	22.851	0	22.851	0	22.851		
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	56.385	56.385	0	56.385		
	Tot	al for Activi	tv 1B07K03	500·		0	0	391 893	56 385	448 278	0	448 278		

Line Item 2CDETKDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skil	ill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED T	TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	106.360.80	Dollars
	Factors	156413 Dollars		0.68 adi F	Factor					
Į	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

Factors 7000 dollars Line Item 2CDETKDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1BAD

Starts In FY

Baseline Cost and Basis of Estimate Activity Filter

	$\overline{}$
Deceurees	
Resources	

es	Cost Element		Skill		Department	Curve	Quantity	Units
A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	9.425.00	Dollars
Factors	9425 Dollars							
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

7000 dollars Factors

Basis for adjustment -

Line Item 2CDETKEA0 - Electrical & Alarms

1BAD10

1B07K03500

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKILLE	ED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	214.139.50	Dollars
	Factors	314911 Dollars		0.68 a	adi Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	7.000.00	Dollars

Factors 7000 dollars

Line Item 2CDETKEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element			Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKIL	LED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	11,116.64	Dollars
	Factors	16348 Dollars		0.68	adj Factor					
	A5C	SUPPLIES	0000	NONE		KB30S	B707 Facility Disposition	Linear	7,000.00	Dollars

Factors 7000 dollars

Line Item 2CDETKPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost .

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es:	Cost Element Skill			Department	Curve	Ouantity Units		
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	15.851.00 Dollars
	Factors	15851 Dollars						

WBS No: 1BAD10 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1B07K03500 WBS Filter 1BAD **Baseline Cost and Basis of Estimate** Activity Filter

Starts In FY KB30S B707 Facility Disposition 7.000.00 Dollars A5C SUPPLIES 0000 NONE Linear

Factors 7000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.756.96	Dollars
	Factors	18757 Dollars							
		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	37.628.10	Dollars

37628.1 Dollars

WBS No: 1BAD1	1 Title: Decommissioning Set 11 2	nd Floor										
Activity ID: 1B07	Description: Set 11 Misc Systems IWCP	Developme	nt					Cost Risk	2 Schedule R	Pisk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPE2000	D&D 2ND FLR & MISC. SET 11 PLANNING & ENGINEERIN	1.00	each	НС	3.758	3.758	110.786	322.272	0	433.058	36.228	469.286
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	102.231	102.231	0	102.231
				500:		3.758	110.786	322.272	102.231	535.288	36.228	571.516

Line Item 2CDPE2000 - D&D 2ND FLR & MISC. SET 11 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	222.99	Hours
Factors	1 Engineer		743.3 hours		0.3 adi Factor			,
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	576.70	Hours
Factors	1 engineer		576.7 hours					1
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	564.60	Hours
Factors	1 engineer		1129.2 hours		0.5 adi. Factor			
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.582.40	Hours
Factors	4 Engineers		1582.4 hours		0.25 adi. Factor			
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	651.76	Hours
Factors			1629.4 hours		0.2 adi. Factor			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	160.00	Hours
Factors			80 hours					1
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	143.910.90	Dollars
Factors			1353.9 hours		63.27 Dollars per hour	0.28 adi. Factor		1
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
Factors	7 1000 4011010		0 adi. Factor					1
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	17.765.30	Dollars
Factors	TITO HOME		53.11 \$/hr		0.3 adi. Factor			1
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	61.665.85	Dollars
Factors			71.29 \$/hr					1
A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	61.667.61	Dollars
Factors			72.82 \$/hr		0.5 adj. Factor			
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S		Linear	16,704.19	Dollars
<u>Factors</u>	534.5 hours		96.16 \$/hr		0.5 adj. Factor	0.65 nuclear safety	eng.	

Page 94 of 145 6/22/00 9:32:05 PM OFFICIAL USE ONLY
 WBS No:
 1BAD11
 Rocky Flats Closure Project
 Project
 Baseline Devi

 Activity ID:
 1B07200500
 Baseline Cost and Basis of Estimate
 WBS Filter 1BAD 4
 1BAD 4

A5H SUBCONTRACTED SRVS E120 SAFETY ENGINEERS KB50S B707 Eng Envir. Sftv & Quality Linear 20.557.79 Dollars

Starts In FY

Factors 662.3 hours 77.6 \$/hr 0.4 adi. Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element		Skill		Department	Curve	Ouantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	64.013.98	Dollars
Factor	s 64014 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	38.216.53	Dollars

Factors 38216.5 Dollars

Activity ID: 1B0	7202500 Description: Set 11 Misc. Systems Stripo	ut						Cost Risk	2 Schedule R	isk 3		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDED2DC0	Decontaminate Set	1.00	each	HC	8.849	8.849	201.100	249.395	0	450.495	61.949	512.444
2CDED2DR0	Duct Removal	1.00	each	HC	7.572	7.572	174.789	12.129	0	186.918	53.844	240.762
2CDED2EA0	Electrical & Alarms	1.00	each	HC	98.986	98.986	2.311.177	130.414	0	2.441.591	711.964	3.153.555
2CDED2EE0	External Equipment Removal	1.00	each	HC	36.947	36.947	850.814	52.536	0	903.350	262.096	1.165.446
2CDED2PR0	Pipe Removal	1.00	each	HC	4.239	4.239	98.963	5.440	0	104.403	30.486	134.889
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.573.174	1.573.174	0	1.573.174
	Tot	al for Activi	ty 1B072025	00:		156.593	3.636.842	449.915	1.573.174	5.659.931	1.120.339	6.780.270

Line Item 2CDED2DC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
75	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00	Hours
Facto	ors 32 Hours	ı				Г	, , ,	
75	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	438.00	Hours
Facto	ors 438 Hours				T			
75	O STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	1.415.00	Hours
Facto	ors 998 Hours		1.41784 4 to 1 adi. Factor					
75	O STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	5.628.00	Hours
Facto		ı	T					
75	1 OVERTIME BASE & PRE.	C120	ID&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00	Hours
Facto		1	1					
75		M010	IFOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00	Hours
Facto		I	I		T			
75		T050	IRADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	200.00	Hours
Facto				L/Dooll	D=0= E 10: D1 1:			
75		1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.126.00	Hours
Facto		0000	NONE	LCDOOO	D707 F 111 D1 111		40, 400, 00	.
A5		0000	NONE	KB30S	B707 Facility Disposition	Linear	12.462.33	Joliars
Factor A5		E420	0.41348 adi Factor OTHER ENGINEERS	KB30C	0.1756 adi. to remv. Waste costs B707 Facility Disposition	Lincor	226 022 00	Dellere
Faat	"	E130	IOTHER ENGINEERS	ND305	D/U/ Facility Disposition	Linear	236.933.00	Dollars

Factors 236933 Dollars

Line Item 2CDED2DR0 - Duct Removal
BOE

Page 95 of 145 6/22/00 9:32:06 PM OFFICIAL USE ONLY

WBS No: 1BAD11 Activity ID: 1B07202500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1E
Activity Filter *

Baseline Devl 1BAD

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779

and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	62.00	Hours
Fc	ctors	62 Hours				T	I		
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	3.576.00	Hours
	ctors	3576 Hours		1		T			
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	632.00	Hours
	ctors	632 Hours	1	I		I			
		STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	557.10	Hours
	ctors	619 Hours	T050	0.9 adi. to allocate Waste Ops for		D707 F F i- Oft - 0 O lit -	15	4 045 75	
_		STRAIGHT TIME BASE 840 Hours	1 1050	RADIATION CONTROL TECHNOLIGI 1.20923 4 to 1 adi. Factor	KBSUH	IB/U/ End Envir. Sitv & Quality	Linear	1.015.75	HOURS
	<i>ctors</i> 750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	487.00	Houre
	ctors	487 Hours	1 1000	ID&D HAZ REDOC TECHT RISK RED	KDSUIT	IBTOT I acility Disposition	Lilical	407.001	louis
		OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	12.00	Hours
Fe	ctors	12 Hours					- IIIIOM	12.000	
	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	715.00	Hours
Fc	ctors	715 Hours			,	T			
	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	126.00	Hours
Fc	ctors	126 Hours	-						
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	124.00	Hours
	ctors	124 Hours	1	I					
_		OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sfty & Quality	Linear	168.00	Hours
	ctors	168 Hours	T060	D&D LIAZ DEDLIC TECH / DISK DED	KD20LL	DZOZ Facility Dianocition	Lincor	07.00	Llouro
_	751 ectors	OVERTIME BASE & PRE. 97 Hours	1 1060	D&D HAZ REDUC TECH / RISK RED	ND30H	B707 Facility Disposition	Linear	97.00	TOUIS
		SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	12.129.34	Dollars
	ctors	149197 Dollars	1 0000	0.46298 adi Factor	ND300	0.1756 adi. to remv. Waste costs	Lilleal	12,123.04	Juliais

Line Item 2CDED2EA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.261.00	Hours
	Factors	8261 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	13.159.00	Hours
	Factors	13159 Hours							

WBS No:1BAD11Rockv Flats Closure ProjectProjectBaseline DevlActivity ID:1B07202500Baseline Cost and Basis of EstimateWBS Filter1BAD

	baseline Cost a	nd Basis of Estimate	ctivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B707 Facilities Management	Linear	3.660.00 Hours
Factors 3660 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	7.754.40 Hours
Factors 8616 Hours	0.9 adi. to allocate Waste Ops	foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	12.360.75 Hours
Factors 16429 Hours	0.75237 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	36.284.00 Hours
Factors 36284 Hours	T			
750 STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TEC	KB20H B707 Facilities Management	Linear	225.00lHours
Factors 225 Hours	1 1			
751 OVERTIME BASE & PRE.	C020 IELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	1.652.00lHours
Factors 1652 Hours	T			
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	2.632.00 Hours
Factors 2632 Hours				
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. WS	KB20H B/07 Facilities Management	Linear	732.00 Hours
Factors 732 Hours	MO40 FOREMEN / TEAM LEADS / OROUR	KDOOG DZOZ Eilit. Diiti	Linne	4 700 00 11
751 OVERTIME BASE & PRE.	I M010 IFOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	1.723.00 Hours
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KREOLI BZOZ Eng Envis Office Occality	Linear	3.286.00 Hours
Factors 3286 Hours	1 1030 IRADIATION CONTROL TECHNOLIGI	RB30H IB707 EIIG EIIVII. SILV & QUAIILV	Lilleal	3.280.00IH0uIS
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	7.257.00 Hours
Factors 7257 Hours	1 1000 IDGD HAZ NEDOC TECH / NISK KED	1 NOSOTI IDIOI I ACIIIIV DISDOSIIIOII	i Lilleai	7.237.001110urs
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	130.414.00 Dollars
Factors 2080537 Dollars	0.35697 adj Factor	0.1756 adj. to remv. Waste		.00,00 D0 010

Line Item 2CDED2EE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Dabit	s for adjustment -							
s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	1.857.00	Hours
Factors	1857 Hours							
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	4.721.00	Hours
Factors	4721 Hours							
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	245.00	Hours
Factors	245 Hours							
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	2.639.70	Hours
Factors	2933 Hours		0.9 adi. to allocate Waste Ops for	oremen				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	5.313.25	Hours
Factors	1910 Hours		2.78181 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	16.532.00	Hours
Factors	16532 Hours							
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	371.00	Hours
Factors	371 Hours							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	944.00	Hours
<u>Factors</u>	944 Hours							

Page 97 of 145 6/22/00 9:32:07 PM *OFFICIAL USE ONLY*

Baseline Devl WBS No: 1BAD11 Proiect **Rocky Flats Closure Project** 1B07202500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate**

		Dasellile Oost al	ia basis	Act	ivity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	49.00 Hours
Factors 49 Hours							
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	587.00 Hours
Factors 587 Hours							
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	382.00 Hours
Factors 382 Hours							
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	3.306.00 Hours
Factors 3306 Hours							
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition		Linear	52.536.16 Dollars
Factors 715/1/2 Dollars		0.41919 adi Eactor		0.1756 adi to romy Wasto co	octo		

Factors 715442 Dollars 0.41818 adi Factor 0.1756 adj. to remv. Waste costs

Line Item 2CDED2PR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	1.950.00	Hours
1	Factors	1950 Hours							
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	70.00	Hours
1	Factors	70 Hours				T			
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	366.00	Hours
1	Factors	366 Hours	1			T			
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	618.75	Hours
1	Factors	635 Hours		0.97441 4 to 1 adi. Factor		T			ı
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	525.00	Hours
1	Factors	525 Hours				T			1
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	390.00	Hours
1	Factors	390 Hours		L					l
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	14.00	Hours
4	Factors	14 Hours		E00514511 / T5111 / 5100 / 000110	1/2000	B=0= E 10: B: 1::			l
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	/3.00	Hours
1	Factors	73 Hours	T050	DADIATION CONTROL TECHNOLOGI	KDEOLL	DZOZ E E i- Ott. 9 Olit.	Linner	407.00	
L	751	OVERTIME BASE & PRE. 127 Hours	1050	RADIATION CONTROL TECHNOLIGI	KBSUH	B/U/ End Envir. Sity & Quality	Linear	127.00	Hours
ď	Factors 751	127 Hours OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KBSUL	P707 Facility Disposition	Lincor	105.00	Hours
		105 Hours	1000	IDAD HAZ KEDUC TECH / KISK KED	NDSUF	ID/U/ FACILITY DISDUSTRION	Linear	105.00	inouis
ď	A5C	1.55	0000	NONE	KB30S	B707 Facility Disposition	Linear	5.440.13	Dollare
L.	Factors		0000	0.40067 adi Factor	NDSUS	0.1756 adi to remy. Waste costs	Lilleal	3.440.13	iDollal S

Factors 77322 Dollars 0.40067 adi Factor 0.1756 adj. to remv. Waste costs

BOE

Resource

rces		Cost Element		Skill	Department	Curve	Quantity	Units
	CON CONTIN	IGENCY	0000 NONE		ZDEPT No Department	Linear	948.766.60	Dollars
	Factors 94870	67 Dollars						
	ESC ESCALA	ATION	0000 NONE		ZDEPT No Department	Linear	624.407.10	Dollars

Factors 624407 Dollars Activity ID: 1B07202505 Description: Set 11 Stripout PL 105/106

Line Item SYS - Contingency And Escalation

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost			

2 Schedule Risk

Cost Risk

WBS No: 1BAD11 Rocky Flats Closure Project Project Baseline Devl Activity ID: 1B07202505 Baseline Cost and Basis of Estimate WBS Filter 1BAD

		~	Activity Filter *				St				
	-		Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDPL05	Stripout PL 105 Execution - D&D	0.50 e	ach HC	4.833	2.416	56.768	34.598	0	91.367	16.009	107.375
2CDEDPL06	Stripout PL 106 Execution - D&D	0.50 e	ach HC	4.833	2.416	56.768	34.598	0	91.367	16.009	107.375
2CDPE2050	D&D PLENUM 105 PLANNING & ENGINEERING	1.00 e	ach HC	883	883	24.618	61.006	0	85.624	6.942	92.566
2CDPE2060	D&D PLENUM 106 PLANNING & ENGINEERING	1.00 e	ach HC	883	883	24.618	61.006	0	85.624	6.942	92.566
SYS	Contingency And Escalation	1.00 e	a EE	0	0	0	0	57.535	57.535	0	57.535
		Total for Activity	1B07202505:		6.598	162,773	191.208	57.535	411.516	45.902	457.418

Line Item 2CDEDPL05 - Stripout PL 105 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00 Hours
1	Factors	41 Hours					+	
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	736.00 Hours
1	Factors	736 Hours	1					
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	35.00 Hours
1	Factors	35 Hours					T	
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	442.80 Hours
1	Factors	492 Hours		0.9 adi. to allocate Waste Ops for	oremen		T	
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	671.75 Hours
1	Factors		1	0.62547 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.951.00 Hours
1	Factors		1	1				
L	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00lHours
1	Factors	90 Hours						1
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.00 Hours
1	Factors							
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	147.00 Hours
1	Factors	147 Hours		I				
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	7.00lHours
	Factors	7 Hours		I				
L	751_	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	98.00lHours
4	Factors		T050	DARIATION CONTROL TECHNOLOGI	KDEOU	D707.5 5 : 00 0.0 III	1	045.0011
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B/U/ End Envir. Sttv & Quality	Linear	215.00 Hours
- 1	Factors		Toco	DOD HAZ DEDIJO TECH / DICK DED	KDOOLI	DZOZ Eilit. Diiti	Linner	200 0011
L	751	OVERTIME BASE & PRE.	1060	D&D HAZ REDUC TECH / RISK RED	KR30H	B707 Facility Disposition	Linear	390.00 Hours
- 1	Factors	390 Hours SUPPLIES	0000	NONE	KDOOC	DZOZ Eilit. Diiti	Linner	CO 40C 04 D-II
L	A5C	+·	0000	NONE	KB30S	B707 Facility Disposition	Linear	69.196.81 Dollars
1	Factors	127034 Dollars		1.08 adj. Factor		0.50436 adj. To remv. Waste costs		

Line Item 2CDEDPL06 - Stripout PL 106 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY *

Units - 1 lot Unit Cost -

1BAD11

1B07202505

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

WBS No:

Activity ID:

s	Cost Element		Skill		Department	Curve	Ouantity Units
750 STRAIG	GHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00 Hours
Factors 41	Hours					T	
750 STRAIG	GHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	736.00 Hours
Factors 736						T	
	•	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	35.00 Hours
Factors 35	Hours						
		M010			B707 Facility Disposition	Linear	442.80 Hours
Factors 492	Hours		0.9 adi. to allocate Waste Ops for				
	OTT TIME DAGE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	671.75lHours
Factors 1074			0.62547 4 to 1 adi. Factor		T		
		1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.951.00 Hours
Factors 195		T070	MAINT TEOLIC (INICTELIMENT TEO	KDOOLI	D707 F 199 M	1.	20.0011
		1070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00lHours
Factors 90 751 OVER	Hours FIME BASE & PRE.	C020	ELECTRICIANS	KD10H	707 Complex Steelworkers	Linear	8.00 Hours
Factors 8	Hours	C020	ELECTRICIANS	KBIUH	707 Complex Steelworkers	Lilleai	0.00IFIOUIS
		C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	147.00 Hours
Factors 147	Hours	0120	D&D SKILLED TRADES	INDSULL	DIOT I ACIIIV DISDOSILIOII	Lilleal	147.001110013
		L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	7.00 Hours
Factors 7	Hours				TO T ACTION THAT IS ACTION		7 10011 10410
751 OVER	TIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	98.00 Hours
Factors 98	Hours						
751 OVER	TIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	215.00 Hours
Factors 215	Hours					ı	1
751 OVER	TIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	390.00 Hours
Factors 390	Hours					I	
A5C SUPPL	·	0000	NONE	KB30S	B707 Facility Disposition	Linear	69,196.81 Dollars
Factors 1270	034 Dollars		1.08 adj. Factor		0.50436 adj. To remv. Waste costs		

Line Item 2CDPE2050 - D&D PLENUM 105 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
l	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	49.60	Hours
_	Factors	1 Engineer		49.6 hours					
	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	38.40	Hours
	Factors	1 enaineer		38.4 hours					
	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	75.30	Hours
_	Factors	1 engineer		75.3 hours					
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	422.00	Hours
	Factors	4 Engineers		105.5 hours					

WBS No:1BAD11Rocky Flats Closure ProjectProjectBaseline DevlActivity ID:1B07202505Baseline Cost and Basis of EstimateWBS Filter1BAD

			Baseline Cost an	d Basis	s of Estimate	ctivity Filter *		Starts In FY *
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition		Linear	217.40 Hours
Factors	2 Admin Assist.		108.7 hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	80.00 Hours
Factors	2 D&D Workers (walkdowns)		40 hours					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition		Linear	34.279.69 Dollars
Factors	6 planners		90.3 hours		63.27 \$/hour		,	
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition		Linear	4.797.00 Dollars
Factors	4797 dollars							
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality		Linear	3.946.07 Dollars
Factors	74.3 hours		53.11 \$/hr					Г
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality		Linear	4.106.30 Dollars
Factors	57.6 hours	1	71.29 \$/hr					
A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality		Linear	8.221.38 Dollars
Factors	112.9 hours	1	72.82 \$/hr					
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality		Linear	2.225.14 Dollars
Factors	35.6 hours	1	96.16 \$/hr		0.65 nuclear safety eng.			
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality		Linear	3.429.92 Dollars
Factors	44.2 hours		77.6 \$/hr					

Factors 44.2 hours 77.6 \$/hr Line Item 2CDPE2060 - D&D PLENUM 106 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	49.60	Hours
Factors	1 Engineer		49.6 hours					
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	38.40	Hours
Factors	1 engineer		38.4 hours					
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	75.30	Hours
Factors	1 engineer		75.3 hours					
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	422.00	Hours
Factors	4 Engineers		105.5 hours					
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	217.40	Hours
Factors	2 Admin Assist.		108.7 hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
Factors	2 D&D Workers (walkdowns)		40 hours					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	34.279.69	Dollars
Factors	6 planners		90.3 hours		63.27 \$/hour			
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	4.797.00	Dollars
Factors	4797 dollars							
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.946.07	Dollars
Factors	74.3 hours		53.11 \$/hr					
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	4.106.30	Dollars
Factors	57.6 hours		71.29 \$/hr					
A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	8.221.38	Dollars
Factors	112.9 hours		72.82 \$/hr					

Page 101 of 145 6/22/00 9:32:10 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 Rockv Flats Closure Project
Activity ID: 1B07202505 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD

					Activity Filter	*	Starts In FY *
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2.225.14 Dollars
Factors	35.6 hours		96.16 \$/hr		0.65 nuclear safety eng.		
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.429.92 Dollars
Factors	44.2 hours		77.6 \$/hr				

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19.139.40	Dollars
	Factors	19139.4 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	38.395.30	Dollars

Factors 38395.3 Dollars

Activity ID: 1B07202605 Description: Set 11 Stripout PL 101/103 Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDPL01	2CDEDPL01 Stripout PL 101 Execution - D&D		each	HC	4.833	2.416	56.768	43.056	0	99.824	16.009	115.833
2CDEDPL03	2CDEDPL03 Stripout PL 103 Execution - D&D		each	HC	4.833	2.416	56.768	43.056	0	99.824	16.009	115.833
2CDPE2010	D&D PLENUM 101 PLANNING & ENGINEERING	1.00	each	HC	1.284	1.284	36.114	91.494	0	127.608	10.184	137.792
2CDPE2030	D&D PLENUM 103 PLANNING & ENGINEERING	1.00	each	HC	1.284	1.284	36.114	91.494	0	127.608	10.184	137.792
SYS	Contingency And Escalation		ea	EE	0	0	0	0	72.982	72.982	0	72.982
	Т			05:		7.401	185.763	269.101	72.982	527.847	52.385	580.232

Line Item 2CDEDPL01 - Stripout PL 101 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00 H	lours
Ι	Factors	41 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	736.00 H	lours
I	Factors	736 Hours							
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	35.00 H	lours
I	Factors	35 Hours		,					
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	442.80 H	lours
I	Factors	492 Hours		0.9 adi. to allocate Waste Ops for	oremen				
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	671.75 H	lours
I	Factors	1074 Hours		0.62547 4 to 1 adi. Factor					
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.951.00	lours
F	Factors	1951 Hours		1		I			
L	750	STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00	lours
I	Factors	90 Hours		1					
L	751	OVERTIME BASE & PRE.	C020	IELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.00 H	lours
I	Factors	8 Hours		1					
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	147.00H	lours
F	Factors	147 Hours		I					
L	751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	7.00 H	lours
I	Factors	7 Hours							

Page 102 of 145 6/22/00 9:32:11 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 Rocky Flats Closure Project
Activity ID: 1B07202605 Raseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD

		Daseille Cost al	iu basis	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	98.00 Hours
Factors 98 Hours						
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	215.00 Hours
Factors 215 Hours						
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	390.00 Hours
Factors 390 Hours						
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	86.112.05 Dollars
Factors 140102 Dollars		1.1 adi. Factor		0.55876 adi. To remv. Waste costs		

Line Item 2CDEDPL03 - Stripout PL 103 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units	
Į	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00 Hours	
	Factors	41 Hours		1	I				_
Į	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	736.00 Hours	
ſ	Factors	736 Hours		1		1			_
Į	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	35.00 Hours	_
ſ	Factors	35 Hours		T		T			_
Į	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	442.80 Hours	J
ſ	Factors	492 Hours		0.9 adi. to allocate Waste Ops f					7
Į	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	671.75 Hours	J
ſ	Factors	1074 Hours		0.62547 4 to 1 adi. Factor					7
Į	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	1.951.00 Hours	_
[Factors	1951 Hours	T 0-0	LANGE TEOLO (NICEDIALENE TEO	I/Dool I	D=0= F 11111 14		20.00	7
ļ	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours	_
ſ	Factors	90 Hours OVERTIME BASE & PRE.	C020	ELECTRICIANS	IZD40LL	707 Complex Steelworkers	Linear	8.00 Hours	٦
ļ	751 Energy	8 Hours	C020	IELEC I RICIANS	KBIUH	707 Complex Steelworkers	Linear	8.00Inouis	_
[<i>Factors</i> 751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	147.00 Hours	٦
ı	Factors	147 Hours	C120	IDAD SKIELED TRADES	KDSUII	BTOT I ACHIEV DISPOSITION	Lilleai	147.00 110015	_
	751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	7.00 Hours	٦
,	Factors	7 Hours		prince of the first transfer of the first tr	INDEGIT	DI OI I domino managomoni	Linoui	7.00 110410	-4
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	98.00 Hours	1
	Factors	98 Hours							
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	215.00 Hours	
,	Factors	215 Hours							_
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	390.00 Hours	
r	Factors	390 Hours		1	1				_
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	86.112.05 Dollars	╛
	Factors	140102 Dollars		1.1 adj. Factor		0.55876 adi. To remv. Waste costs			

Line Item 2CDPE2010 - D&D PLENUM 101 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect 1BAD WBS Filter Activity Filter

Starts In FY *

Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

WBS No:

Activity ID:

1BAD11

1B07202605

s	Cost Element		Skill		Department	Curve	Quantity	Units
750		F020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear		Hours
Facto			74.3 hours		TO CONTRACTOR			
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	57.70	Hours
Facto	rs 1 engineer		57.7 hours					
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	112.90	Hours
Facto	rs 1 enaineer		112.9 hours					•
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	633.20	Hours
Facto	rs 4 Engineers	1	158.3 hours	I				
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	326.00	Hours
Facto	rs 2 Admin Assist.		163 hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00	Hours
Facto	rs 2 D&D Workers (walkdowns)		40 hours					1
A52		E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	12.335.71	Dollars
Facto		1	72.82 \$/hr					
A57	7 LATA	P070	ICOST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	51.400.55	Dollars
Facto	- John Hold	1	135.4 hours		63.27 \$/hour			
A50		0000	INONE	KB30S	B707 Facility Disposition	Linear	7.195.00	Dollars
Facto	1100 4011410	1						1
A5I		E020	ICIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	5.921.77	Dollars
Facto			53.11					
A5H		E040	IELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	6.166.58	Dollars
Facto			71.29 \$/hr		I			
_A5l		I E080	INUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.337.71	Dollars
Facto		F400	96.16 \$/hr	KDE00	0.65 nuclear safety eng.		5 407 40	ъ "
A5l		E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	5.137.12	Dollars
Facto	rs 66.2 hours		77.6 \$/hr					

Line Item 2CDPE2030 - D&D PLENUM 103 PLANNING & ENGINEERING

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units	
Į.	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	74.30 Hours	
r	Factors	1 Engineer		74.3 hours					_
Į.	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	57.70 Hours	
	Factors	1 enaineer		57.7 hours					
Į.	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	112.90 Hours	
	Factors	1 enaineer		112.9 hours					
L	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	633.20 Hours	
_	Factors	4 Engineers		158.3 hours					_

Page 104 of 145 6/22/00 9:32:12 PM OFFICIAL USE ONLY WBS No: 1BAD11 Activity ID: 1B07202605

Rocky Flats Closure Project Rasalina Cost and Rasis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

	Baseline Cost an	d Basis of Estimate Activity Filter *		Starts In FY *
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	KB30S B707 Facility Disposition	Linear	326.00 Hours
Factors 2 Admin Assist.	163 hours			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	80.00 Hours
Factors 2 D&D Workers (walkdowns)	s) 40 hours			
A52 TENERA	E070 MECHANICAL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	12.335.71 Dollars
Factors 169.4 hours	72.82 \$/hr			
A57 LATA	P070 COST ESTIMATORS PLANNERS AN	KB30S B707 Facility Disposition	Linear	51.400.55 Dollars
Factors 6 planners	135.4 hours	63.27 \$/hour		
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	7.195.00 Dollars
Factors 7195 dollars				
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	5.921.77 Dollars
Factors 111.5 hours	53.11 \$/hr			
A5H SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	6.166.58 Dollars
Factors 86.5 hours	71.29 \$/hr			
A5H SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINEER	KB50S B707 Eng Envir. Sftv & Quality	Linear	3.337.71 Dollars
Factors 53.4 hours	96.16 \$/hr	0.65 nuclear safety eng.		
A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	5.137.12 Dollars
Factors 66.2 hours	77.6 \$/hr			

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	24.278.22	Dollars
	Factors	24278.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	48.704.23	Dollars

48704.2 Dollars

Description: Sot 11 Stripout DI 102/104

Cost Piels 2 Sahadula Piels

ACTIVITY ID. 160	Description: Set 11 Stripout PL 102/104							Cost Kisk	2 Scheaule K	usk Z		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDPL02	Stripout PL 102 Execution - D&D	0.50	each	HC	5.575	2.788	65.711	39.513	0	105.224	18.531	123.754
2CDEDPL04	Stripout PL 104 Execution - D&D	0.50	each	HC	5.575	2.788	65.711	39.513	0	105.224	18.531	123.754
2CDPE2020	D&D PLENUM 102 PLANNING & ENGINEERING	1.00	each	HC	1.284	1.284	36.114	91.494	0	127.608	10.184	137.792
2CDPE2040	D&D PLENUM 104 PLANNING & ENGINEERING	1.00	each	HC	1.284	1.284	36.114	91.494	0	127.608	10.184	137.792
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	75.262	75.262	0	75.262
	То	tal for Activ	ity 1B072027	'05:		8.143	203.649	262.014	75.262	540.925	57.429	598.354

Line Item 2CDEDPL02 - Stripout PL 102 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00	Hours
	Factors	41 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	915.00	Hours
	Factors	915 Hours							
	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	B707 Facilities Management	Linear	35.00	Hours
	Fastore	25 Houre							

WBS No: 1BAD11 Activity ID: 1B07202705

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD

			baseline Cost an	u basis	Aci Estimate Aci	ivity Filter *	Starts In FY *
750 S	TRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	574.20 Hours
Factors	638 Hours		0.9 adi. to allocate Waste Ops for	oremen			
750 S	TRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	768.00 Hours
Factors	1190 Hours		0.64538 4 to 1 adi. Factor				
750 S	TRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.157.00 Hours
Factors	2157 Hours						
750 S	TRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
Factors	90 Hours						
751 O'	VERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.00 Hours
Factors	8 Hours						
751 O'	VERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	183.00 Hours
Factors	183 Hours		_				
751 O'	VERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	7.00 Hours
Factors	7 Hours		_				
751 O'	VERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	128.00 Hours
Factors	128 Hours						
751 O'	VERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	238.00lHours
Factors	238 Hours						
751 O'	VERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	431.00lHours
Factors	431 Hours						
A5C SI	UPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	79.025.16 Dollars
Factors	140024 Dollars		1.05 adj. Factor		0.53749 adj. To remv. Waste of	osts	

Line Item 2CDEDPL04 - Stripout PL 104 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00	Hours
نے	Factors	41 Hours							
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	915.00	Hours
4	Factors	915 Hours		T		T		1	
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	35.00	Hours
ŕ	Factors	35 Hours		T	ı	T			
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	574.20	Hours
ď	Factors	638 Hours		0.9 adi. to allocate Waste Ops for	oremen				
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	768.00	Hours
ď	Factors	1190 Hours		0.64538 4 to 1 adi. Factor	1			1	
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.157.00	Hours
ď	Factors	2157 Hours		T	1			1	
L	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00	Hours
ď	Factors	90 Hours		T	1			1	
L	751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	8.00	Hours
ď	Factors	8 Hours		T	1			1	
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	183.00	Hours
4	Factors	183 Hours							

Page 106 of 145 6/22/00 9:32:14 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 **Rocky Flats Closure Project** Activity ID: 1B07202705 Resoling Cost and Resis of Estimate

Baseline Devl Proiect 1BAD WBS Filter

		Daseille Cost all	u Dasis	OI Estimate	Activity Filter *		Starts In FY *
751 OVERTIME BASE & PRE.	L060 I	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management		Linear	7.00 Hours
Factors 7 Hours							
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	128.00 Hours
Factors 128 Hours							
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	238.00 Hours
Factors 238 Hours							
751 OVERTIME BASE & PRE.	T060 I	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	431.00 Hours
Factors 431 Hours							
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition		Linear	79.025.16 Dollars
Factors 140024 Dollars		1.05 adi. Factor		0.53749 adi. To remv. Waste	costs		

Line Item 2CDPE2020 - D&D PLENUM 102 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
Į	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	74.30 Hours
r	Factors	1 Engineer		74.3 hours				
L	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	57.70 Hours
ŕ	Factors	1 engineer		57.7 hours				
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	112.90 Hours
ŕ	Factors	1 engineer		112.9 hours				
L	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	633.20 Hours
r	Factors			158.3 hours				
Ĺ	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	326.00 Hours
Г	Factors		1	163 hours				
L	750	STRAIGHT TIME BASE	T060		KB30H	B707 Facility Disposition	Linear	80.00 Hours
ſ	Factors			40 hours				
Ļ	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	51.400.55 Dollars
Г	Factors			135.4 hours		63.27 \$/hour		
Ļ	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	7.195.00 Dollars
Г	Factors	7195 dollars		I				
L		SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	5.921.77 Dollars
ſ	Factors			53.11 \$/hr	1/0=00	D=0= F		2 122 525 "
L		SUBCONTRACTED SRVS	L E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	6.166.58 Dollars
Г	Factors		F070	71.29 \$/hr	I/DE00	D707 F F : 0% 0 O !!!		10 005 71 5 11
L		SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	12.335.71 Dollars
ſ	Factors		F000	72.82 \$/hr	KDEOC	DZOZ E E Ott. 9 Olit.	Linean	0.007.74 Dellene
L	_	SUBCONTRACTED SRVS 53.4 hours	E080	NUCLEAR (CRITICALITY) ENGINEER	VR202		Linear	3.337.71 Dollars
ſ	Factors	53.4 hours SUBCONTRACTED SRVS	F120	96.16 \$/hr SAFETY ENGINEERS	KDEOC	0.65 nuclear safety eng. B707 Eng Envir. Sfty & Quality	Linner	5.137.12 Dollars
L			L E120		VD202	ID/U/ ENG ENVII. SILV & QUAIITY	Linear	5.137.12ID0llars
	Factors	66.2 hours		77.6 \$/hr				

Line Item 2CDPE2040 - D&D PLENUM 104 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Page 107 of 145 6/22/00 9:32:15 PM OFFICIAL USE ONLY Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter *

Starts In FY *

Item - See Line Item Title
Units - 1 lot
Unit Cost Unit Cost Adjustment factor Revised Unit Cost Basis for adjustment -

Resources

WBS No:

Activity ID:

1BAD11

1B07202705

s	Cost Element		Skill		Department	Curve	Ouantity Units		
750	STRAIGHT TIME BASE	E020	E020 CIVIL ENGINEERS		SSOC Salaried	Linear	74.30 Hours		
Factors	1 Engineer		74.3 hours						
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	57.70 Hours		
Factors	1 engineer		57.7 hours						
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	112.90 Hours		
Factors	1 engineer		112.9 hours						
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	633.20 Hours		
Factors									
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	326.00 Hours		
Factors									
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00 Hours		
Factors	2 D&D Workers (walkdowns)		40 hours						
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	51.400.55 Dollars		
Factors	6 planners		135.4 hours		63.27 \$/hour				
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	7.195.00 Dollars		
Factors	7195 dollars								
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	5.921.77 Dollars		
Factors	111.5 hours		53.11 \$/hr						
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	6.166.58 Dollars		
Factors	86.5 hours		71.29 \$/hr						
A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	12.335.71 Dollars		
Factors	169.4 hours		72.82 \$/hr						
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.337.71 Dollars		
Factors	53.4 hours		96.16 \$/hr		0.65 nuclear safety eng.				
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	5.137.12 Dollars		
Factors	66.2 hours		77.6 \$/hr						

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element Skill			Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	25.036.49	Dollars
į.	Factors	25036.5 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	50.225.38	Dollars

Factors 50225.4 Dollars

Activity ID: 1B07202805 Description: Set 11 Stripout PL 107/108 Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDPL07	Stripout PL 107 Execution - D&D	0.50 ea		HC	5.454	2.727	64.038	36.683	0	100.721	18.059	118.779
2CDEDPL08	Stripout PL 108 Execution - D&D		each	HC	5.454	2.727	64.038	36.683	0	100.721	18.059	118.779
2CDPE2070	D&D PLENUM 107 PLANNING & ENGINEERING		each	HC	883	883	24.618	61.006	0	85.624	6.942	92.566
2CDPE2080	PE2080 D&D PLENUM 108 PLANNING & ENGINEERING		each	HC	883	883	24.618	61.006	0	85.624	6.942	92.566
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	60.355	60.355	0	60.355
	Т	Total for Activity 1B07202805:					177.313	195.376	60.355	433.044	50.002	483.047

Line Item 2CDEDPL07 - Stripout PL 107 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Page 108 of 145 6/22/00 9:32:15 PM *OFFICIAL USE ONLY*

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1BAD

Starts In FY *

Item Desc - Similar B771 and B779 Activity
Breakdown of Historical Data:
Item - See Line Item Title
Units - 1 lot
Unit Cost Unit Cost Adjustment factor - 50%
Revised Unit Cost Basis for adjustment - Line Item Quantity

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

WBS No:

Activity ID:

1BAD11

1B07202805

es		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00 Hours
r	Factors	41 Hours						
L	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	848.00 Hours
ŕ	Factors	848 Hours		T		T		
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	39.00 Hours
ŕ	Factors	39 Hours		1		T		
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	493.20 Hours
ŕ	Factors	548 Hours		0.9 adi. to allocate Waste Ops f		T		
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	762.75 Hours
ŕ	Factors	1200 Hours		0.63563 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.203.00 Hours
ŕ	Factors	2203 Hours		I				
L	750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00lHours
ſ	Factors 751	90 Hours OVERTIME BASE & PRE.	0000	ELECTRICIANS	KD40LL	707 Complex Steelworkers	Linner	8.00 Hours
Ļ		8 Hours	C020	IELEC I RICIANS	KBTUH	707 Complex Steelworkers	Linear	8.00[Hours
ſ	Factors 751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	170.00 Hours
L	Factors	170 Hours	C120	IDAD SKIELED TRADES	NDSUIT	BTOT I ACHIEV DISDOSITION	Lilleal	170.00 110015
ſ	751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH, WS	KB20H	R707 Facilities Management	Linear	8.00 Hours
L	Factors	8 Hours	LUUU	INIOCION COT OF LOTEN TO LETTON. WO	INDZUIT	DIOT I delinies Manadement	Linear	0.00 1100 3
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	110.00 Hours
,-	Factors	110 Hours						
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	240.00 Hours
	Factors	240 Hours						
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	441.00 Hours
r	Factors	441 Hours		T				
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	73.365.27 Dollars
	Factors	137248 Dollars		1.03 adj. Factor		0.51898 adj. To remv. Waste costs		

ractors 137246 Dollars 1.03 aq. ractor 0.51696 aq. 10 femiv. 1

Line Item 2CDEDPL08 - Stripout PL 108 Execution - D&D

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	41.00	Hours
	Factors	41 Hours							
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	848.00	Hours
	Factors	848 Hours							

Page 109 of 145 6/22/00 9:32:16 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 *Activity ID:* 1B07202805

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1BAD

	Baseline Cost ai	nd Basis of Estimate	ctivity Filter *	Starts In FY *
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS	KB20H B707 Facilities Management	Linear	39.00 Hours
Factors 39 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	493.20 Hours
Factors 548 Hours	0.9 adi. to allocate Waste Ops f	foremen		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	762.75 Hours
Factors 1200 Hours	0.63563 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	2.203.00 Hours
Factors 2203 Hours				
750 STRAIGHT TIME BASE	T070 MAINT, TECHS, (INSTRUMENT TEC	KB20H B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours		T		
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	8.00lHours
Factors 8 Hours	0.000 0.000 0.000 0.000	LADOUL DESCRIPTION OF THE		1=0 00k1
751 OVERTIME BASE & PRE.	C120 ID&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	170.00lHours
Factors 170 Hours 751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS	KD2011 D707 Facilities Management	Linner	8.00 Hours
Factors 8 Hours	1 LOGO IIVIISSION SUP SPEC II IPLITCH. WS	RB20H B707 Facilities Management	Linear	8.00IHOUIS
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	110.00 Hours
Factors 110 Hours	I WOTO II CINEIWEIN TEAW LEADON CINCOL	TOOGS IDTOT I dollicy Disposition	Lilleai	1 10.001110413
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir Sfty & Quality	Linear	240.00 Hours
Factors 240 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	441.00 Hours
Factors 441 Hours			<u> </u>	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	73,365.27 Dollars
Factors 137248 Dollars	1.03 adj. Factor	0.51898 adj. To remv. Waste	costs	

Line Item 2CDPE2070 - D&D PLENUM 107 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

Du	sis for adjustment -						
s	Cost Element		Skill		Department	Curve	Ouantity Units
75	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	49.60 Hours
Fact	ors 1 Engineer		49.6 hours				
75	50 STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	38.40 Hours
Fact	ors 1 engineer		38.4 hours				
75	50 STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	75.30 Hours
Fact	ors 1 engineer		75.3 hours				
75	50 STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	422.00 Hours
Fact	ors 4 Engineers		105.5 hours				
75	50 STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	217.40 Hours
Fact	ors 2 Admin Assist.		108.7 hours				
75	50 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00 Hours
Fact	ors 2 D&D Workers (walkdowns)		40 hours				
A5	52 TENERA	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	8.221.38 Dollars
Fact	ors 112.9 hours		72.82 \$/hr				
A	57 LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	34.279.69 Dollars
Fact	ors 6 planners		90.3 hours		63.27 \$/hour		

Page 110 of 145 6/22/00 9:32:17 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07202805 1BAD Activity ID: WBS Filter **Baseline Cost and Basis of Estimate**

		Activity Filter	. *	Starts In FY *
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	4.797.00 Dollars
Factors 4797 dollars				
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S B707 Eng Envir, Sftv & Quality	Linear	3.946.07 Dollars
Factors 74.3 hours	53.11 \$/hr			
A5H SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S B707 Eng Envir, Sftv & Quality	Linear	4.106.30 Dollars
Factors 57.6 hours	71.29 \$/hr			
A5H SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENG	GINEER KB50S B707 Eng Envir. Sftv & Quality	Linear	2.225.14 Dollars
Factors 35.6 hours	96.16 \$/hr	0.65 nuclear safety eng.		
A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	KB50S B707 Eng Envir, Sftv & Quality	Linear	3.429.92 Dollars

Factors 44.2 77.6 \$/hr hours

Line Item 2CDPE2080 - D&D PLENUM 108 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		C	ost Element		Skill		Department	Curve	Ouantity	Units
Į	750	STRAIGHT	TTIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	49.60	Hours
ī	Factors	1	Enaineer		49.6 hours					
Į	750	STRAIGHT	TTIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	38.40	Hours
ſ	Factors	1	enaineer		38.4 hours					
Į	750	STRAIGHT	TTIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	75.30	Hours
ſ	Factors	1	enaineer		75.3 hours					
Į	750	STRAIGH	T TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	422.00	Hours
ſ	Factors	4	Engineers		105.5 hours					
Į	750	ISTRAIGH	TTIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	217.40	Hours
ſ	Factors	2	Admin Assist.	T000	108.7 hours	KDOOLI	DZOZ E W D: W	1.1	20.00	
ļ	750	STRAIGH	TIME BASE	T060		KB30H	B707 Facility Disposition	Linear	80.00	Hours
[Factors A52	TENERA	D&D Workers (walkdowns)	F070	40 hours MECHANICAL ENGINEERS	VDE00	B707 Eng Envir. Sftv & Quality	Linear	8.221.38	Dollara
1	Factors	112 9	hours	E070	72.82 \$/hr	NDSUS	B707 Elid Elivii. Sitv & Quality	Lilleai	0.221.30	Dullais
[A57	LATA	Hours	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	34.279.69	Dollars
,	Factors	6	planners	1070	90.3 hours	NDOOO	63.27 \$/hour	Lincai	04.27 3.03	Dollars
		SUPPLIES		0000	NONE	KB30S	B707 Facility Disposition	Linear	4.797.00	Dollars
	Factors	4797	dollars		•		•		•	<u>'</u>
	A5H	SUBCONT	RACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.946.07	Dollars
r	Factors	74.3	hours		53.11 \$/hr					
Į	A5H	SUBCONT	RACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	4.106.30	Dollars
ī	Factors	57.6	hours		71.29 \$/hr					
Į	A5H	SUBCONT	RACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2.225.14	Dollars
ſ	Factors	35.6	hours		96.16 \$/hr		0.65 nuclear safety eng.			
l	A5H		RACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	3.429.92	Dollars
	Factors	44.2	hours		77.6 \$/hr					

Line Item SYS - Contingency And Escalation

BOE

Resources Cost Element Skill Department Curve CON CONTINGENCY 0000 NONE ZDEPT No Department Linear Factors 19769.7 Dollars

Ouantity

19,769.72 Dollars

Units

Rockv Flats Closure Project

Baseline Cost and Basis of Estimate

Project

WBS Filter

1BAD

Activity Filter * Starts In FY *

0000 NONE ZDEPT No Department Linear 40.585.27 Dollars

ESC ESCALATION
Factors 40585.3 Dollars

1BAD11

1B07202805

Activity ID: 1B07203500 Description: Set 11, Misc. Systems - Execution Trades Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDET2DC0	Decontaminate Set	1.00	each	HC	0	0	0	1.035.000	0	1.035.000	0	1.035.000
2CDET2DR0	Duct Removal	1.00	each	HC	0	0	0	186.639	0	186.639	0	186.639
2CDET2EA0	Electrical & Alarms	1.00	each	HC	0	0	0	2.964.855	0	2.964.855	0	2.964.855
2CDET2EE0	External Equipment Removal	1.00	each	HC	0	0	0	1.205.978	0	1.205.978	0	1.205.978
2CDET2PR0	Pipe Removal	1.00	each	HC	0	0	0	108.464	0	108.464	0	108.464
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2.942.606	2.942.606	0	2.942.606
	Tot	al for Activi	tv 1B072035	00:		0	0	5.500.936	2.942.606	8.443.542	0	8.443.542

Line Item 2CDET2DC0 - Decontaminate Set

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill			Department	Curve	Quantity	Units
	A5B CONSTRUCTION C120 D&D SKILLED TRADES		KB20C	Building Trades Proi B Estimating Only	Linear	969.000.00	Dollars		
4	Factors	969000 Dollars		adi Factor					
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	66.000.00	Dollars

Factors 66000 dollars

Line Item 2CDET2DR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units		
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	76,639.00	Dollars		
	Factors 76639 Dollars										
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	110,000.00	Dollars		

Factors 110000 dollars

Line Item 2CDET2EA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Page 112 of 145 6/22/00 9:32:18 PM *OFFICIAL USE ONLY*

WBS No: 1BAD11 **Rocky Flats Closure Project** Activity ID: 1B07203500 **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1BAD Activity Filter

Starts In FY *

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	2.849.855.00	Dollars
	Factors	2849855 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	115.000.00	Dollars

Factors 115000 dollars

Basis for adjustment -

Line Item 2CDET2EE0 - External Equipment Removal

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	1.059.978.00	Dollars
	Factors	1059978 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	146.000.00	Dollars

Factors 146000 dollars

Line Item 2CDET2PR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	S Cost Element Skill			Department	Curve	Quantity	Units		
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	65,464.00	Dollars
	Factors	65464 Dollars							
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	43,000.00	Dollars

Factors 43000 dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.090.426.00	Dollars
	Factors	2090426 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	852.180.10	Dollars

Factors 852180 Dollars

Activity ID: 1B07203505 Description: Set 11, Stripout PL 105/106 - Trades Cost Risk 1 Schedule Risk 1												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETPL05	Stripout PL 105 Execution - Trades	0.50	each	НС	0	0	0	51.331	0	51.331	0	51.331
2CDETPL06	Stripout PL 106 Execution - Trades	0.50	each	HC	0	0	0	51.331	0	51.331	0	51.331
SYS	Contingency And Escalation	1.00) ea	EE	0	0	0	0	54.916	54.916	0	54.916
	Total for Activity 1B07203505:							102.661	54.916	157.577	0	157.577

WBS No: 1BAD11 Rocky Flats Closure Project
Activity ID: 1B07203505 Baseline Cost and Basis of Estimate

Proiect Baseline Devl
WBS Filter 1BAD
Activity Filter *

Starts In FY

Line Item 2CDETPL05 - Stripout PL 105 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated

Resources

Cost Element Skill Department Curve Quantity Units
A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only Linear 102.661.00 Dollars

Factors 102661 Dollars

Line Item 2CDETPL06 - Stripout PL 106 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

es		Cost Element	Skill		Department	Curve	Ouantity	Units	
	A5B	CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	102.661.	00 Dollars	

Factors 102661 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

Line Item

ces	Cost Element Skill			Department	Curve	Quantity	Units		
	CON	CONTINGENCY	0000	NONE	ZDEPT No Department		Linear	39.012.48	Dollars
	Factors	39012.5 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	15.903.78	Dollars

Factors 15903.8 Dollars

Activity ID: 1B07203605 Description: Set 11, Stripout PL 101/103 - Trades

Description

Cost Risk 1 Schedule Risk

Materials/ Sub

Cost

 Contingency & Escalation
 Total Prime Cost
 Burden Cost
 Total Cost

 0
 40.679
 0
 40.679

2CDETPL01 HC Stripout PL 101 Execution - Trades 0.50 each n 0 40.679 2CDETPL03 Stripout PL 103 Execution - Trades HC 0 40.679 0 40.679 0 0.50 each Λ 40.679 FF 11.617 Contingency And Escalation 0 0 SYS 1.00 ea 0 0 0 11.617 11.617 Total for Activity 1B07203605: 0 0 81.357 11.617 92.974 0 92.974

BOE

Type

Quantity

Units

Line Item 2CDETPL01 - Stripout PL 101 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Labor

Hours/Unit

Labor Hours

Total

Labor Cost

Total

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Page 114 of 145 6/22/00 9:32:19 PM *OFFICIAL USE ONLY*

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1BAD

Baseline Cost and Basis of Estimate Activity Filter

Resources	Cost Element	Skill	Department	Curve	Ouantity	Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	81.357.24	Dollars

Factors 142732 Dollars 0.57 adi. Factor

Line Item 2CDETPL03 - Stripout PL 103 Execution - Trades

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

1BAD11

1B07203605

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Skill Resources Cost Element Department Curve A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only Linear 81.357.24 Dollars Factors 142732 Dollars 0.57 adi. Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
	CON CONTINGENCY 0000 NONE		NONE	ZDEPT	No Department	Linear	3.805.16	Dollars	
_	Factors	3805.16 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEDT	No Dopartment	Lippar	7 911 62	Dollars

Factors 7811.62 Dollars

Activity ID: 1B07203705 Description: Set 11, Stripout PL 102/104 - Trades

Cost Risk 1 Schedule Risk

Starts In FY

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETPL02	Stripout PL 102 Execution - Trades	0.50	each	HC	0	0	0	26.273	0	26.273	0	26.273
2CDETPL04	Stripout PL 104 Execution - Trades	0.50	each	HC	0	0	0	26.273	0	26.273	0	26.273
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15.522	15.522	0	15.522
	Total for Activity 1B07203705:						0	52,546	15,522	68,068	0	68,068

Line Item 2CDETPL02 - Stripout PL 102 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

S	Cost Element	Skill	Department	Curve	Ouantity Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	52.545.95 Dollars
	Factors 26405 Dollars	1.99 adj. Factor			

Line Item 2CDETPL04 - Stripout PL 104 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Page 115 of 145 6/22/00 9:32:20 PM OFFICIAL USE ONLY WBS No: 1BAD11
Activity ID: 1B07203705

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
WBS Filter
1BAD
1BAD
4 Activity Filter
**

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

S Cost Element Skill Department Curve Quantity Units
A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proj B Estimating Only Linear 52.545.95 Dollars

Factors 26405 Dollars 1.99 adi. Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element Skill		Skill		Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9.257.65	Dollars
F	actors	9257.65 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6.264.48	Dollars

Factors 6264.48 Dollars

Activity ID: 1B07203805 Description: Set 11, Stripout PL 107/108 - Trades Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETPL07	Stripout PL 107 Execution - Trades	0.50 ea	ch HC	0	0	0	52.925	0	52.925	0	52.925
2CDETPL08	Stripout PL 108 Execution - Trades	0.50 ea	ch HC	0	0	0	52.925	0	52.925	0	52.925
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	56.622	56.622	0	56.622
	Tot	al for Activity 1	1B07203805:		0	0	105.850	56.622	162.472	0	162.472

Line Item 2CDETPL07 - Stripout PL 107 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

ces	Cost Element Skill		Skill		Department	Curve		Quantity	Units	
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Lir	near	105.850.00	Dollars

Factors 105850 Dollars

Line Item 2CDETPL08 - Stripout PL 108 Execution - Trades

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, and these properties the properties of the proper

modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - 50%

Revised Unit Cost -

Basis for adjustment - Line Item Quantity (Adjustment Factor) reflects effort to execute activity for one plenum, instead of the two plenems estimated.

Resources

ırces		Cost Element		Skill		Department	Curve		Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Lir	near	105.850.00	Dollars

Factors 105850 Dollars

Line Item SYS - Contingency And Escalation

BOE

December	Cont. El	CI :II	D	C	0	T T ***
Resources	Cost Element	Skill	Department	Curve	Quantity	Units

Starts In FY *

WBS No: 1BAD11 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07203805 Baseline Cost and Basis of Estimate 1BAD

			Baseline Cost an	ia Basis	Of Estimate Activity Filter	*	Starts In FY *
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	40.224.34 Dollars
Factors	40224.3 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16.397.80 Dollars

Factors 16397.8 Dollars

WBS No: 1BAD1	2 Title: Decommissioning Set 12 (A Rooms &	Corrid								
Activity ID: 1B07	7100500 Description: IWCP Development - CA Ro	oms/1st floor					Cost Risk	2 Schedule R	Risk 2		
Line Item	Description	Quantity	Units BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPECAR0	D&D CA ROOMS SET 12 PLANNING & ENGINEERING	1.00 ea	ach HC	2.382	2.382	70.419	192.340	0	262.758	22.388	285.146
SYS	Contingency And Escalation	1.00 ea	a EE	0	0	0	0	61.873	61.873	0	61.873
	Tot	2.382	70.419	192.340	61.873	324.632	22.388	347.019			

Line Item 2CDPECAR0 - D&D CA ROOMS SET 12 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity Units
L	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	142.65 Hours
1	Factors	1 Engineer		475.5 hours		0.3 adi Factor		
L	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	369.00 Hours
1	Factors	1 enaineer		369 hours				T 1
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	361.20 Hours
1	Factors	1 enaineer		722.4 hours		0.5 adi. Factor		
L	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.012.30 Hours
į.	Factors	4 Engineers		1012.3 hours		0.25 adi. Factor		
L	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	417.00 Hours
į.	Factors	 Admin Assist. 		1042.5 hours		0.2 adi. Factor		
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	80.00 Hours
4	Factors	2 D&D Workers (walkdowns)		40 hours				
L	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	92.060.88 Dollars
ď	Factors	6 planners		866.1 hours		63.27 Dollars per hour	0.28 adi. Factor	
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00 Dollars
ď	Factors	46028 dollars		0 adi. Factor				
L	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	11.365.01 Dollars
4	Factors	713.3 hours		53.11 \$/hr		0.3 adi. Factor		
L		SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	39.451.89 Dollars
- 1	Factors	553.4 hours	=	71.29 \$/hr	1/0=00	D=0= 5		a= aa= aa = ;;
L	A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	25.625.36 Dollars
ď	Factors	703.8 hours	F000	72.82 \$/hr	I/DE00	0.5 adi. Factor		10 005 00 0 11
L	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S		Linear	10.685.06 Dollars
ď	Factors	341.9 hours	F400	96.16 \$/hr	I/DE00	0.5 adi. Factor	0.65 nuclear safet	
L	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	13.151.65 Dollars
ď	Factors	423.7 hours	E400	77.6 \$/hr	KDOOG	0.4 adi. Factor	Lineau	0.00 Dallana
L	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS		B707 Facility Disposition	Linear	0.00lDollars
1	Factors	470819 Powertool balance adj.		0 adi factor for 11.9 % reduction	on			

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1BAD12 Baseline Devl Proiect **Rocky Flats Closure Project** 1B07100500 1BAD Activity ID: WBS Filter

Baseline Cost and Basis of Estimate Activity Filter Skill Resources Cost Element Department

Total for Activity 1B07102500:

	ON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	37.609.95 Dollars
-	ctors	37610 Dollars	0000	HOME	- 2 061 1	INO DEDGILITION	Linear	07:000:30 <u> </u> D0 a13
			0000	NONE	ZDEPT	No Department	Linear	24.263.29 Dollars

Factors 24263.3 Dollars

Activity ID: 1B0	ctivity ID: 1B07102500 Description: Equipment Stripout-CA rooms/1st floor Cost Risk 2 Schedule Risk 3											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
	-			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDRCV0	Remove Chainvevors to SR	1.00	each	HC	4.335	4.335	100.370	78.282	0	178.652	28.304	206.956
2CDEDRDC0	Decontaminate Set	1.00	each	HC	3.371	3.371	76.607	23.406	0	100.013	21.603	121.616
2CDEDRDR0	Duct Removal	1.00	each	HC	24.744	24.744	584.454	121.160	0	705.613	164.816	870.429
2CDEDREA0	Electrical & Alarms	1.00	each	HC	24.271	24.271	566.618	224.843	0	791.461	159.786	951.248
2CDEDREE0	External Equipment Removal	1.00	each	HC	1.404	1.404	32.561	24.342	0	56.903	9.182	66.085
2CDEDRPR0	Pipe Removal	1.00	each	HC	7.695	7.695	178.833	96.046	0	274.879	50.431	325.310
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	365.689	365.689	0	365.689

Line Item 2CDEDRCV0 - Remove Chainveyors to SR

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

65.820

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	21.00 Hours
Factors 21 Hours				
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	882.00 Hours
Factors 882 Hours				
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTC)	H. WS KB20H B707 Facilities Management	Linear	27.00 Hours
Factors 27 Hours	1			
750 STRAIGHT TIME BASE	I M010 IFOREMEN / TEAM LEADS / GR	OUP KB30S B707 Facility Disposition	Linear	223.00 Hours
Factors 223 Hours				
750 STRAIGHT TIME BASE		OLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	659.25 Hours
Factors 935 Hours	0.70508 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	1.755.00lHours
Factors 1755 Hours	0000 515050101110			4 00 11
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	4.00 Hours
Factors 4 Hours	C120 D&D SKILLED TRADES	MOON DIST. IN D. W.	1.	470.0011
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	176.00 Hours
Factors 176 Hours 751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH	H. WS KB20H B707 Facilities Management	Linear	5.00 Hours
Factors 5 Hours	LUGU INISSION SUP SPEC II (FLITCE	1. WS KB20H B/0/ Facilities Walladement	Lilledi	3.00IHOUIS
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GR	OUP KB30S B707 Facility Disposition	Linear	45.00 Hours
Factors 45 Hours	I MOTO II CINEINIEN / TEAMILEADS / GIN	COI NESCO ETOT ACIIILY DISDUSITION	Lilleal	+3.00 i louis
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNO	OLIGI KB50H B707 Eng Envir, Sftv & Quality	Linear	187.00 Hours
Factors 187 Hours	, 1000 partition continue recinit	SEIST TRESSET IDTOT ETIC ETIVIT. ONV & GUGIIIV	LITICAL	107.000110013
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK	RED KB30H B707 Facility Disposition	Linear	351.00 Hours
Factors 351 Hours		THE THEORY IS A TRANSPORTED TO THE TRANSPORTED TO T		. SST.OOII IOUIO

Page 118 of 145 6/22/00 9:32:22 PM OFFICIAL USE ONLY

Starts In FY

365.689

2.473.211

568.080

WBS No: 1BAD12
Activity ID: 1B07102500

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

WBS Filter
Activity Filter
**

Rockv Flats Closure Proiect
WBS Filter
Activity Filter
**

			Daseline Cost an	iu Dasis	Activity Filter	*	Starts In FY *
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	58.149.90 Dollars
Factors	64611 Dollars		0.9 adi Factor				
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	20.132.00 Dollars

Factors 20132 Dollars

Line Item 2CDEDRDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
Į	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	32.00	Hours
ı	Factors	32 Hours			ı				
Į	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	158.00	Hours
ī	Factors	158 Hours						1	
Į	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	540.00	Hours
ſ	Factors	386 Hours		1.39896 4 to 1 adi. Factor				T	
Į	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	2.128.00	Hours
ſ	Factors	2128 Hours		T	ı				
Į	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00	Hours
ſ	Factors	6 Hours		1	I				
Į	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	4.00	Hours
ſ	Factors	4 Hours						1 1	
Į	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	77.00	Hours
ſ	Factors	77 Hours			ı			1 1	
Į	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	426.00	Hours
ĺ	Factors	426 Hours		I					
ļ	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	23.406.30	Dollars
	Factors	26007 Dollars		0.9 adi Factor					

Line Item 2CDEDRDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

The Table Time The Title

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
L	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00	Hours
	Factors	15 Hours				,			
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	10,235.00	Hours
	Factors	10235 Hours				,			
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	1.343.00	Hours
	Factors	1343 Hours				,			
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	1.583.10	Hours
_	Factors	1759 Hours		0.9 adi, to allocate Waste Ops for	oremen				

WBS No: 1BAD12 Rocky Flats Closure Project Project Baseline Devl
Activity ID: 1B07102500 Baseline Cost and Basis of Estimate 1BAD

	Baseline Cost	and Basis of Estimate Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIG	KB50H B707 Eng Envir. Sftv & Quality	Linear	3.324.75 Hours
Factors 4474 Hours	0.74313 4 to 1 adi. Factor			
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	3.064.00 Hours
Factors 3064 Hours				
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KB10H 707 Complex Steelworkers	Linear	3.00 Hours
Factors 3 Hours				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	3.047.00 Hours
Factors 3047 Hours			T	
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH. W	S KB20H B707 Facilities Management	Linear	269.00 Hours
Factors 269 Hours				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	352.00 Hours
Factors 352 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIG	SI KB50H B707 Eng Envir. Sftv & Quality	Linear	895.00 Hours
Factors 895 Hours				
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition	Linear	613.00 Hours
Factors 613 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	121.159.80 Dollars
Factors 134622 Dollars	0.9 adi Factor			

Factors 134622 Dollars 0.9 adj Factor

Line Item 2CDEDREA0 - Electrical & Alarms

BOF

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	1.848.00 Hours
Factor	s 1848 Hours						
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	3.539.00 Hours
Factor							
750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	926.00 Hours
Factor				1/2000	D-0 W D: W		1
750	STRAIGHT TIME BASE 2052 Hours	M010	FOREMEN / TEAM LEADS / GROUP		B707 Facility Disposition	Linear	1.846.80 Hours
Factor 750	STRAIGHT TIME BASE	T050	0.9 adi. to allocate Waste Ops for RADIATION CONTROL TECHNOLIGI		P707 Eng Envir Office Quality	Linear	3.056.75 Hours
Factor		1030	0.70693 4 to 1 adi. Factor	KBSUH	B707 Elid Elivii. Sitv & Quality	Lilleai	3.036.73 Houis
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	8.688.00 Hours
Factor						E II 1994	
750	STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
Factor	s 90 Hours						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	370.00 Hours
Factor							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	708.00lHours
Factor			L				
751	OVERTIME BASE & PRE.	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	185.00lHours
Factor 751	S 185 Hours OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KD20C	B707 Facility Disposition	Linear	410.00 Hours
Factor		IVIUTU	IFOREIVIEN / TEAW LEADS / GROUP	ND305	IB/U/ Facility Disposition	Linear	4 IU.UUIMOUIS
<u>r actor</u>	S 410 Flouis						

Page 120 of 145 6/22/00 9:32:23 PM *OFFICIAL USE ONLY*

WBS No: 1BAD12 Rocky Flats Closure Project Project Baseline Devl 1B07102500 Resulting Cost and Resist of Estimate WBS Filter 1BAD

 Baseline Cost and Basis of Estimate
 WBS Filter Activity Filter *
 1BAD

 T050
 RADIATION CONTROL TECHNOLIGI
 KB50H
 B707 Eng Envir. Sftv & Quality
 Linear
 865.00 Hours

 T060
 D&D HAZ REDUC TECH / RISK RED
 KB30H
 B707 Facility Disposition
 Linear
 1.738.00 Hours

Linear

224.843.40 Dollars

Factors 249826 Dollars 0.9 adj Factor

0000 NONE

Line Item 2CDEDREE0 - External Equipment Removal

A5C SUPPLIES

865

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

KB30S B707 Facility Disposition

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title
Units - 1 lot

751 OVERTIME BASE & PRE.

751 OVERTIME BASE & PRE.

1738 Hours

Hours

Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	15.00 Hours
ıń	Factors	15 Hours						T T
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	361.00 Hours
ΙĒ	Factors	361 Hours		_				
L	750	STRAIGHT TIME BASE	L060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	12.00lHours
ſ	Factors	12 Hours		1				
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	57.00lHours
ſ	Factors	57 Hours		L		<u> </u>		T
L		STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	212.25 Hours
ſ	Factors	367 Hours		0.57834 4 to 1 adi. Factor		<u></u>		
L	750	STRAIGHT TIME BASE	1060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	488.00lHours
ſ	Factors	488 Hours	0000	EL ECTRICIANO	KDAOLI	707.0		0.00
L	751 Factors	OVERTIME BASE & PRE. 3 Hours	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	3.00lHours
ſ	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	72.00 Hours
L	Factors	72 Hours	C120	D&D SKILLED TRADES	NDSUIT	BTOT I acility Disposition	Lilleai	72.00ji lodis
ſ	751	OVERTIME BASE & PRE.	1.060	MISSION SUP SPEC II (FLTTCH. WS	KB20H	B707 Facilities Management	Linear	2.00 Hours
-	Factors	2 Hours				DIVI SSIMOS MANAGONON	=1112531	2100 110010
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	11.00 Hours
	Factors	11 Hours				•		•
L	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sftv & Quality	Linear	73.00 Hours
r	Factors	73 Hours						,
L	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	98.00 Hours
г	Factors	98 Hours		_				
Į	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	24.342.30 Dollars
	Factors	27047 Dollars		0.9 adi Factor				

Line Item 2CDEDRPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Page 121 of 145 6/22/00 9:32:24 PM *OFFICIAL USE ONLY*

Proiect Baseline Devl **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate** Activity Filter

Starts In FY

Activity ID:	1B07102500

1BAD12

Resources

WBS No:

	Activii	ty Filter "	Starts In FY			
Basis for adjustment -			Curve			
Cost Element	Skill Department	Curve	Ouantity Units			
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES KB30H B707 Facility Disposition	Linear	4.356.00 Hours			
Factors 4356 Hours						
750 STRAIGHT TIME BASE	L060 MISSION SUP SPEC II (FLTTCH, WS KB20H B707 Facilities Management	Linear	155.00 Hours			
Factors 155 Hours						
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition	Linear	559.80 Hours			
Factors 622 Hours	0.9 adi. to allocate Waste Ops foremen					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	1.143.25 Hours			
Factors 976 Hours	1.17136 4 to 1 adi. Factor					
750 STRAIGHT TIME BASE	T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition	Linear	217.00 Hours			
Factors 217 Hours		T				
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES KB30H B707 Facility Disposition	Linear	871.00 Hours			
Factors 871 Hours						
751 OVERTIME BASE & PRE.	L060 MISSION SUP SPEC II (FLTTCH, WS KB20H B707 Facilities Management	Linear	31.00 Hours			
Factors 31 Hours						
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP KB30S B707 Facility Disposition	Linear	124.00 Hours			
Factors 124 Hours						
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI KB50H B707 Eng Envir. Sftv & Quality	Linear	195.00 Hours			
Factors 195 Hours						
751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition	Linear	43.00lHours			
Factors 43 Hours						
A5C SUPPLIES	0000 NONE KB30S B707 Facility Disposition	Linear	96.046.20 Dollars			
Factors 106718 Dollars	0.9 adi Factor					

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	121.649.40	Dollars
	Factors	121649 Dollars							
		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	244.039.20	Dollars

244039 Dollars

A -4114-	. ID.	4007400500
Activity	/ IU:	1B07103500

Activity ID: 1B0	7103500 Description: IWCP Execution Trades - Ca	A Rms/1st	floor corrido					Cost Risk	2 Schedule F	Risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETRDC0	Decontaminate Set	1.00	each	HC	0	0	0	554.490	0	554.490	0	554.490
2CDETRDR0	Duct Removal	1.00	each	HC	0	0	0	90.124	0	90.124	0	90.124
2CDETREA0	Electrical & Alarms	1.00	each	HC	0	0	0	712.038	0	712.038	0	712.038
2CDETREE0	External Equipment Removal	1.00	each	HC	0	0	0	44.210	0	44.210	0	44.210
2CDETRPR0	Pipe Removal	1.00	each	HC	0	0	0	57.564	0	57.564	0	57.564
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	209.836	209.836	0	209.836
	Tot	tal for Activ	ity 1B071035	00:		0	0	1.458.426	209.836	1.668.263	0	1.668.263

Line Item 2CDETRDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Rocky Flats Closure Project Project Baseline Devl

Baseline Cost and Basis of Estimate

WBS Filter 1BAD
Activity Filter *

Resources	Cost Element	Skill	Department	Curve	<i>Ouantity</i>	Units
	A5B CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	554.490.00	Dollars

Factors 554490 Dollars Line Item 2CDETRDR0 - Duct Removal

1BAD12

1B07103500

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	90.124.00	Dollars

Factors 90124 Dollars

Basis for adjustment -

Line Item 2CDETREA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Item - See Line Item Ti Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element	Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120 D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	712.038.00	Dollars

Factors 712038 Dollars

Line Item 2CDETREE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

rces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	44.210.00	Dollars
	Factors	44210 Dollars							

Line Item 2CDETRPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Page 123 of 145 6/22/00 9:32:25 PM *OFFICIAL USE ONLY*

Starts In FY

WBS No: 1BAD12 Baseline Devl Proiect Rocky Flats Closure Project 1BAD Activity ID: 1B07103500 WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY Revised Unit Cost -Basis for adjustment -Resources Cost Element Skill Department Curve **Ouantity** Units A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only 57.564.00 Dollars Linear Factors 57564 Dollars Line Item SYS - Contingency And Escalation BOE Units Resources Cost Element Department Curve Quantity CON CONTINGENCY 0000 NONE ZDEPT No Department 69.803.86 Dollars Linear 69803.9 Dollars Factors ESC ESCALATION 0000 NONE ZDEPT No Department Linear 140.032.60 Dollars 140033 Dollars WBS No: 1BAD13 **Decommissioning Set 13 Cold Office Space** Title: Activity ID: 1B07300500 Description: IWCP Development - Cold Office Space Cost Risk 2 Schedule Risk 2 BOEMaterials/ Sub Contingency Total Prime Line Item Description Labor Labor Hours Labor Cost Burden Cost Total Cost Type Hours/Unit **Total Total** Cost & Escalation Cost 2CDPECOF0 D&D COLD OFFICES SET 13 PLANNING & ENGINEERING HC 1.00 each 919 919 26.881 76.894 103.776 8.699 112.474 SYS Contingency And Escalation 1.00 ea EE 0 23.742 23.742 0 23.742 Total for Activity 1B07300500: 919 26.881 76.894 23 742 127 517 8.699 136.216 Line Item 2CDPECOF0 - D&D COLD OFFICES SET 13 PLANNING & ENGINEERING Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 BOE and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -Units Resources Skill **Ouantity** Cost Element Department Curve 53.22 Hours E020 CIVIL ENGINEERS 750 STRAIGHT TIME BASE S100S SSOC Salaried Linear Factors 1 Engineer 177.4 hours 0.3 adi Factor 750 STRAIGHT TIME BASE ELECTRICAL ENGINEERS S100S SSOC Salaried 137.60 Hours Linear 1 engineer 137.6 hours Factors 750 STRAIGHT TIME BASE MECHANICAL ENGINEERS S100S SSOC Salaried 134.70 Hours Linear Factors 1 engineer 269.4 hours 0.5 adi. Factor 750 STRAIGHT TIME BASE E130 OTHER ENGINEERS KB30S B707 Facility Disposition 377.60 Hours Linear 0.25 adi. Factor Engineers 377.6 hours Factors 4 750 STRAIGHT TIME BASE G010 ADMINISTRATIVE ASSISTANTS KB30S B707 Facility Disposition Linear 155.52 Hours adi. Factor Factors 2 Admin Assist. 388.8 hours D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition 60.00 Hours 750 STRAIGHT TIME BASE Linear 2 D&D Workers (walkdowns) Factors hours 34.332.83 Dollars A57 LATA COST ESTIMATORS PLANNERS AN KB30S B707 Facility Disposition Linear Factors 6 planners 323 hours 63.27 Dollars per hour 0.28 adi. Factor A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition 0.00 Dollars Linear Factors 17168 dollars adi. Factor A5H SUBCONTRACTED SRVS E020 CIVIL ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 4.238.18 Dollars Linear 53.11 \$/hr 0.3 adi, Factor Factors 266 hours A5H SUBCONTRACTED SRVS E040 ELECTRICAL ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 14.714.26 Dollars

71.29 \$/hr

Factors 206.4 hours

Page 124 of 145 6/22/00 9:32:26 PM OFFICIAL USE ONLY

Linear

WBS No: 1BAD13 Proiect Baseline Devl **Rocky Flats Closure Project** 1B07300500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate** Auginian Ellann

	· · · · · · · · · · · · · · · · · · ·	Activity Futer		Starts in F i
A5H SUBCONTRACTED SRVS	E070 MECHANICAL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	14.716.92 Dollars
Factors 404.2 hours	72.82 \$/hr	0.5 adi. Factor		
A5H SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINEER	KB50S B707 Eng Envir. Sftv & Quality	Linear	3.987.76 Dollars
Factors 127.6 hours	96.16 \$/hr	0.5 adi, Factor	0.65 nuclear safe	tv ena.
A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	4.904.32 Dollars
Factors 158 hours	77.6 \$/hr	0.4 adi. Factor		
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	0.00 Dollars

Factors 179495 Powertool balance adj. adj factor for 11.9 % reduction

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	14.610.24	Dollars	
	Factors 14610.2 Dollars									
		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	9.131.48	Dollars	

Factors 9131.48 Dollars

Activity ID: 1B07302500 Description: IWCP D&D Execution - Cold Office Space Cost Risk 2 Schedule Risk

Camer In EV

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDEDNDC0	Decontaminate Set	1.00	each	HC	245	245	5.758	13.823	0	19.581	1.733	21.313
2CDEDNDR0	Duct Removal	1.00	each	HC	1.563	1.563	36.871	47.906	0	84.777	11.095	95.872
2CDEDNEA0	Electrical & Alarms	1.00	each	HC	485	485	11.330	61.246	0	72.576	3.409	75.985
2CDEDNEE0	External Equipment Removal	1.00	each	HC	294	294	6.925	29.155	0	36.080	2.084	38.164
2CDEDNPR0	Pipe Removal	1.00	each	HC	2.094	2.094	49.338	41.325	0	90.663	14.847	105.511
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	88.873	88.873	0	88.873
	Total for Activity 1B07302500:						110.221	193.455	88.873	392.550	33.169	425.719

Line Item 2CDEDNDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	28.00	Hours
Factor	s 28 Hours							
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	29.00	Hours
Factor	s 29 Hours							
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	35.00	Hours
Factor	s 35 Hours		1 4 to 1 adi. Factor					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	112.00	Hours
Factor	s 112 Hours							
751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	6.00	Hours
Factor	s 6 Hours							
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	6.00	Hours
Factor	s 6 Hours							
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sfty & Quality	Linear	7.00	Hours
Factor	s 7 Hours							
751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	22.00	Hours
Factor	s 22 Hours							

WBS No: 1BAD13
Rockv Flats Closure Proiect
Activity ID: 1B07302500
Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

WBS Filter
Activity Filter
*
Baseline Devl
WBS Filter
Activity Filter
*
Baseline Devl

A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition Linear 13.823.00 Dollars

Factors 13823 Dollars

Line Item 2CDEDNDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element Skill		Skill		Department	Curve	Ouantity Units
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	578.00 Hours
F	actors	578 Hours						
L	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	186.00 Hours
F	actors	186 Hours						
L	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Qualitv	Linear	223.00 Hours
F	actors	223 Hours		1 4 to 1 adi. Factor				
L	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	315.00 Hours
F	actors	315 Hours						
L	751	OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	116.00 Hours
F	actors	116 Hours		T				
L	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	37.00 Hours
F	actors	37 Hours		T				
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	45.00 Hours
F	actors	45 Hours		1		T		
	751	OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	63.00 Hours
F	actors	63 Hours		T				
L	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	47.906.00 Dollars

Line Item 2CDEDNEA0 - Electrical & Alarms

Factors

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

47906 Dollars

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

								, , , , , , , , , , , , , , , , , , , ,
es		Cost Element	Skill			Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	84.00 Hours
	Factors	84 Hours						
	750	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	84.00 Hours
	Factors	84 Hours						
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	35.00 Hours
	Factors	35 Hours						
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	42.00 Hours
	Factors	42 Hours		1 4 to 1 adi. Factor				
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	84.00 Hours
	Factors	84 Hours						

Starts In FY

 WBS No:
 1BAD13
 Rocky Flats Closure Project
 Project

 Activity ID:
 1B07302500
 Baseline Cost and Basis of Estimate
 WBS Fill

Proiect Baseline Devl WBS Filter 1BAD

		Baseline Cost an	ia Basis	Activity Filter	*	Starts In FY *
750 STRAIGHT TIME BASE	T070	MAINT, TECHS, (INSTRUMENT TEC	KB20H	B707 Facilities Management	Linear	90.00 Hours
Factors 90 Hours			,			
751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB10H	707 Complex Steelworkers	Linear	17.00 Hours
Factors 17 Hours						
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	17.00 Hours
Factors 17 Hours						
751 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	7.00 Hours
Factors 7 Hours						
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	8.00 Hours
Factors 8 Hours						
751 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	17.00 Hours
Factors 17 Hours						
A5C SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	61.246.00 Dollars
France 64046 Dellars						

Factors 61246 Dollars

Line Item 2CDEDNEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:
Item - See Line Item Title
Units - 1 lot
Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
75	STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	84.00	Hours
Facto	ers 84 Hours							
75	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	35.00	Hours
Facto	rs 35 Hours							
75	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sftv & Quality	Linear	42.00	Hours
Facto	rs 42 Hours		1 4 to 1 adi. Factor					
75	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	84.00	Hours
Facto	ers 84 Hours							
75	1 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H	B707 Facility Disposition	Linear	17.00	Hours
Facto	ers 17 Hours							
75	1 OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	7.00	Hours
Facto	rs 7 Hours							
75	1 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	8.00	Hours
Facto	ers 8 Hours							
75	1 OVERTIME BASE & PRE.	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	17.00	Hours
Facto	ers 17 Hours							
A5	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	29.155.00	Dollars

Factors 29155 Dollars

Line Item 2CDEDNPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Page 127 of 145 6/22/00 9:32:28 PM *OFFICIAL USE ONLY*

Proiect 1BAD13 Baseline Devl **Rocky Flats Closure Project** 1B07302500 1RAD Activity ID:

Activity ID:	1807302300	Baseline Cost ar	nd Basis of Estimate	Activity Filter	*	Starts In FY *
	Basis for adjustment -			7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		DEWIN IV AV
Resources	Cost Element	Skill	Department		Curve	Ouantity Units
	750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition		Linear	637.00 Hours
	Factors 637 Hours					
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition		Linear	249.00 Hours
	Factors 249 Hours					
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir, Sftv & Qua	alitv	Linear	299.00 Hours
	Factors 299 Hours	1 4 to 1 adi Factor				

00 Hours 560.00 Hours 750 STRAIGHT TIME BASE T060 D&D HAZ REDUC TECH / RISK RED KB30H B707 Facility Disposition Linear 560 Hours Factors 751 OVERTIME BASE & PRE C120 D&D SKILLED TRADES KB30H B707 Facility Disposition Linear 127.00 Hours Factors 127 Hours 751 OVERTIME BASE & PRE. M010 FOREMEN / TEAM LEADS / GROUP | KB30S | B707 Facility Disposition 50.00 Hours Linear Factors 50 Hours T050 RADIATION CONTROL TECHNOLIGI | KB50H | B707 Eng Envir. Sftv & Quality 751 OVERTIME BASE & PRE. 60.00 Hours

60 Factors Hours T060 D&D HAZ REDUC TECH / RISK RED | KB30H B707 Facility Disposition 112.00 Hours 751 OVERTIME BASE & PRE Linear Factors 112 Hours

41.325.00 Dollars A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition Linear

Factors 41325 Dollars Line Item SYS - Contingency And Escalation

BOE

WBS No:

Resources

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	50.752.68	Dollars
	Factors	50752.7 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	38.120.77	Dollars

Factors 38120.8 Dollars

Activity ID: 1B07303500 Description: IWCP D&D Execution Trades - Cold Office Space Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETNDC0	Decontaminate Set	1.00	each	HC	0	0	0	49.485	0	49.485	0	49.485
2CDETNDR0	Duct Removal	1.00	each	HC	0	0	0	112.165	0	112.165	0	112.165
2CDETNEA0	Electrical & Alarms	1.00	each	HC	0	0	0	229.989	0	229.989	0	229.989
2CDETNEE0	External Equipment Removal	1.00	each	HC	0	0	0	41.130	0	41.130	0	41.130
2CDETNPR0	Pipe Removal	1.00	each	HC	0	0	0	58.291	0	58.291	0	58.291
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	262.682	262.682	0	262.682
	To	tal for Activit	v 1B0730350	00.		0	0	491 060	262 682	753 742	0	753 742

Line Item 2CDETNDC0 - Decontaminate Set

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

_			
Res	SOU	rces	

s		Cost Element Skill			Department	Curve	Quantity	Units	
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	49,484.79	Dollars

183277 Dollars adi Factor Factors 0.27

WBS No: 1BAD13 Activity ID: 1B07303500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1BAD Activity Filter

Starts In FY

Line Item 2CDETNDR0 - Duct Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

Resources

Cost Element Skill Curve Units Department Quantity A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only 112.165.20 Dollars Linear

Factors 196781 Dollars adi Factor

0.27

adi Factor

Line Item 2CDETNEA0 - Electrical & Alarms

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

Units Cost Element Department Curve **Ouantity** A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only Linear 229.989.30 Dollars Factors 489339 Dollars 0.47 adi Factor

Line Item 2CDETNEE0 - External Equipment Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resource

rces		Cost Element		Skill	Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	41.129.64	Dollars

152332 Dollars Factors

Line Item 2CDETNPR0 - Pipe Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources	Cost Element	Skiii	Department	Curve	Ouantity	Units	

WBS No: Baseline Devl 1BAD13 Proiect **Rocky Flats Closure Project** 1B07303500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate**

Starts In FY KB20C Building Trades Proj B Estimating Only A5B CONSTRUCTION C120 D&D SKILLED TRADES Linear 58.291.05 Dollars

Factors 102265 Dollars 0.57 adi Factor

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	186.609.00	Dollars
	Factors	186609 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	76.072.79	Dollars

Factors 76072.8 Dollars

WBS No: 1BAD1	4 Title: Decommissioning Set 14 E	xterior Ta	nks									
Activity ID: 1B07	7400500 Description: IWCP Development - Extern	al Tanks						Cost Risk	2 Schedule F	Risk 3		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEEXT0	D&D EXT. TANKS SET 14 PLANNING & ENGINEERING	1.00	each	НС	225	225	6.835	17.029	0	23.864	2.413	26.276
SYS Contingency And Escalation		1.00	ea	EE	0	0	0	0	3.968	3.968	0	3.968
	Tot	al for Activi	I for Activity 1B07400500:				6.835	17.029	3.968	27.831	2.413	30.244

Line Item 2CDPEEXT0 - D&D EXT. TANKS SET 14 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es		Cost Element	Skill		Department	Curve	Quantity Uni	its
	750	STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	14.40 Hours	s
r	Factors	1 Engineer	48 hours		0.3 adi Factor			
Ĺ	750	STRAIGHT TIME BASE	E040 ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	42.00 Hours	s
	Factors	1 engineer	42 hours					
Ĺ	750	STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	33.00 Hours	S
г	Factors	1 engineer	66 hours		0.5 adi. Factor			
L	750	STRAIGHT TIME BASE	E130 OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	102.00 Hours	S
Г	Factors	4 Engineers	102 hours		0.25 adi. Factor			
L	750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	33.60 Hours	s
Г	Factors	2 Admin Assist.	84 hours		0.2 adi. Factor			
Ĺ	A57	LATA	P070 COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	9.034.96 Dolla	rs
Г	Factors	6 planners	85 hours		63.27 Dollars per hour	0.28 adi. Factor		
Ĺ	A5C	SUPPLIES	0000 NONE	KB30S	B707 Facility Disposition	Linear	0.00 Dolla	rs
Г	Factors	6200 dollars	0 adi. Factor					
Ĺ	A5H	SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	637.32 Dolla	rs
Г	Factors	40 hours	53.11 \$/hr		0.3 adi. Factor			
Ĺ	A5H	SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2.851.60 Dolla	rs
Г	Factors	40 hours	71.29 \$/hr					
Ĺ	A5H	SUBCONTRACTED SRVS	E070 MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	1.456.40 Dolla	rs
Г	Factors	40 hours	72.82 \$/hr		0.5 adi. Factor			
L	A5H	SUBCONTRACTED SRVS		KB50S		Linear	1.000.06 Dolla	rs
г	Factors	32 hours	96.16 \$/hr		0.5 adj. Factor	0.65 nuclear safety		
L	A5H	SUBCONTRACTED SRVS		KB50S	B707 Eng Envir, Sfty & Quality	Linear	2,048.64 Dolla	rs
	Factors	66 hours	77.6 \$/hr		0.4 adj. Factor			

Page 130 of 145 6/22/00 9:32:29 PM OFFICIAL USE ONLY WBS No: 1BAD14 **Rocky Flats Closure Project** Activity ID: 1B07400500 **Baseline Cost and Basis of Estimate**

Baseline Devl Proiect WBS Filter 1BAD Activity Filter

Starts In FY

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	2.739.88	Dollars
_	Factors 2739.88 Dollars						
	ESC ESCALATION	0000	NONE	ZDEPT No Department	Linear	1.227.93	Dollars

1227.93 Dollars Factors

Activity ID: 1B07	7403500 Description: IWCP Execution Trades - Ex	Cost Risk 1 Schedule Risk 1										
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDETTTR0	Tank Removal	1.00	each	НС	0	0	0	104.209	0	104.209	0	104.209
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15.575	15.575	0	15.575
	Tot		0	0	104.209	15.575	119.784	0	119.784			

Line Item 2CDETTTR0 - Tank Removal

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resource

ces	Cost Element			Skill		Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proj B Estimating Only	Linear	104,209.00	Dollars

Factors 104209 Dollars Line Item SYS - Contingency And Escalation

BOE

Resources

ces	es Cost Element Skill			Department		Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	10.705.58	Dollars
_	Factors	10705.6 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.869.84	Dollars

4869.84 Dollars

WBS No: 1BAD1	5 Title: Decommissioning Set 15 T	vpe 1 Bldgs.												
Activity ID: 1B07	Activity ID: 1B07500500 Description: IWCP Development - Type 1 Bldq. Cost Risk 2 Schedule Risk 2													
Line Item	Description	Quantity Un	its BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost			
			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost					
2CDPET1B0	D&D TYPE 1 BLDGS SET 15 PLANNING & ENGINEERING	1.00 each	НС	108	108	3.221	9.661	0	12.883	1.137	14.020			
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	2.117	2.117	0	2.117			
	Tot	otal for Activity 1B07500500: 108 3.2					9.661	2.117	15.000	1.137	16.137			

Line Item 2CDPET1B0 - D&D TYPE 1 BLDGS SET 15 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

> Page 131 of 145 6/22/00 9:32:30 PM OFFICIAL USE ONLY

WBS No: 1BAD15 Baseline Devl Proiect Rocky Flats Closure Project 1BAD Activity ID: 1B07500500 WBS Filter **Baseline Cost and Basis of Estimate** <u>Activi</u>ty Filter Starts In FY Units Resources Cost Element Skill Department Curve 750 STRAIGHT TIME BASE E020 CIVIL ENGINEERS S100S SSOC Salaried Linear 6.69 Hours Engineer 22.3 hours 0.3 adi Factor ELECTRICAL ENGINEERS S100S SSOC Salaried 17.30 Hours 750 STRAIGHT TIME BASE Linear 1 engineer 17.3 hours 750 STRAIGHT TIME BASE MECHANICAL ENGINEERS S100S SSOC Salaried 16.90 Hours Linear Factors 1 engineer 33.8 hours 0.5 adi. Factor 750 STRAIGHT TIME BASE E130 OTHER ENGINEERS KB30S B707 Facility Disposition Linear 47.40 Hours 47.4 hours 0.25 adi. Factor Factors 4 Engineers 750 STRAIGHT TIME BASE G010 ADMINISTRATIVE ASSISTANTS KB30S B707 Facility Disposition Linear 19.52 Hours 2 Admin Assist. 48.8 hours adi. Factor Factors A57 LATA P070 COST ESTIMATORS PLANNERS AN KB30S B707 Facility Disposition Linear 4.304.89 Dollars Factors 6 40.5 hours 63.27 Dollars per hour 0.28 adi. Factor planners A5C SUPPLIES 0000 NONE KB30S B707 Facility Disposition Linear 0.00 Dollars Factors 2154 dollars adi. Factor Ω A5H SUBCONTRACTED SRVS CIVIL ENGINEERS KB50S B707 Eng Envir, Sftv & Quality 532.16 Dollars Linear Factors 33.4 hours 53.11 \$/hr adi. Factor A5H SUBCONTRACTED SRVS E040 ELECTRICAL ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 1.860.67 Dollars Linear Factors 26.1 hours 71.29 \$/hr A5H SUBCONTRACTED SRVS **E070 MECHANICAL ENGINEERS** KB50S B707 Eng Envir, Sftv & Quality Linear 1 845 99 Dollars 72.82 \$/hr adi. Factor Factors 50.7 hours 0.5 E080 NUCLEAR (CRITICALITY) ENGINEER KB50S B707 Eng Envir, Sftv & Quality A5H SUBCONTRACTED SRVS Linear 500.03 Dollars 96.16 \$/hr adi. Factor 16 hours 0.65 nuclear safety eng. Factors A5H SUBCONTRACTED SRVS E120 SAFETY ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 617.70 Dollars Linear Factors 19.9 hours 77 6 \$/hr 0.4 adi Factor Line Item SYS - Contingency And Escalation BOE Resources Cost Element Units Department Curve **Ouantity** CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 1.461.84 Dollars Factors 1461.84 Dollars ESC ESCALATION ZDEPT No Department 655.15 Dollars 0000 NONE Linear Factors 655.155 Dollars Activity ID: 1B07503500 Description: IWCP Execution Trades - Type 1 Bldg. Cost Risk 1 Schedule Risk **Ouantity** Total Prime Line Item Description Units BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Burden Cost Total Cost TypeHours/Unit Total Total Cost & Escalation Cost HC 881.598 881.598 2CDETOBD0 Type 1 Buildings 1.00 each 0 O 0 881.598 EE 132.091 SYS Contingency And Escalation 1.00 ea 0 0 132.091 0 132.091 Total for Activity 1B07503500: 0 0 881.598 132.091 1.013.688 0 1.013.688 Line Item 2CDETOBD0 - Type 1 Buildings Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 BOE and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -

Resources	Cost Element		Skill		Department	Curve	Quantity	Units
	A5B CONSTRUCTION	C120 D&D SKILLE	ED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	731.801.50	Dollars
	Factors 1180325 Dollars	0.62 a	adi Factor					

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

WBS No: 1BAD15 Proiect Baseline Devl **Rocky Flats Closure Project** 1B07503500 WBS Filter 1BAD Activity ID: **Baseline Cost and Basis of Estimate** Activity Filter

			Daseline Cost an	iu Dasis	Activity Filter	*	Starts In FY *
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	12.090.00 Dollars
Factors	12090 Dollars						
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	137.706.00 Dollars

Factors 137706 Dollars

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	89.619.88	Dollars
	Factors	89619.9 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	42.470.96	Dollars

Factors 42471 Dollars

WBS No: 1BAD	16 Title: Demolition Set 16 B707 Clu	ster										
Activity ID: 1B0	7600500 Description: IWCP Development 707 Clus	ster Demoli	ition					Cost Risk	2 Schedule R	Risk 2		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPEDEM0	DEMO 707 CLUSTER SET 16 PLANNING & ENGINEERING	1.00	each	HC	2.309	2.309	68.982	206.784	0	275.766	24.006	299.772
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	161.962	161.962	0	161.962
	Tota	al for Activi	ty 1B076005	500:		2.309	68.982	206.784	161.962	437.729	24.006	461.734

Line Item 2CDPEDEMO - DEMO 707 CLUSTER SET 16 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element	Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	143.07	7 Hours
Factors	1 Engineer	476.9 hours		0.3 adi Factor			
750	STRAIGHT TIME BASE	E040 ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	370.00	Hours
Factors	1 engineer	370 hours					
750	STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	362.25	Hours
Factors	1 engineer	724.5 hours		0.5 adi. Factor			
750	STRAIGHT TIME BASE	E130 OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1.015.30) Hours
Factors	4 Engineers	1015.3 hours		0.25 adi. Factor			
750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	418.24	1 Hours
Factors	 Admin Assist. 	1045.6 hours		0.2 adi. Factor			т
A57	LATA	P070 COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	92.337.25	Dollars
Factors	6 planners	868.7 hours		63.27 Dollars per hour	0.28 adi. Factor		т
A5C	SUPPLIES	0000 NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
Factors	46165 dollars	0 adi. Factor		T			т
A5H	SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	11.398.47	Dollars
Factors	715.4 hours	53.11 \$/hr		0.3 adi. Factor			т
A5H	SUBCONTRACTED SRVS	E040 ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	39.573.08	Dollars
Factors	555.1 hours	71.29 \$/hr		T			т
A5H	SUBCONTRACTED SRVS	E070 MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	39.570.39	Dollars
Factors	1086.8 hours	72.82 \$/hr		0.5 adj. Factor	1		
A5H	SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir, Sfty & Quality	Linear	10,716.31	Dollars
Factors	342.9 hours	96.16 \$/hr		0.5 adj. Factor	0.65 nuclear safety	eng.	

Page 133 of 145 6/22/00 9:32:32 PM OFFICIAL USE ONLY WBS No: 1BAD16 Baseline Devl Proiect Rocky Flats Closure Project 1BAD Activity ID: 1B07600500 WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY A5H SUBCONTRACTED SRVS E120 SAFETY ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 13.188.90 Dollars Linear 424.9 hours 77.6 \$/hr adi. Factor 0.00 Dollars A5H SUBCONTRACTED SRVS F130 OTHER ENGINEERS KB30S B707 Facility Disposition Linear 1025217 Powertool balance adj. 0 adj factor for 11.9 % reduction Line Item SYS - Contingency And Escalation BOE Resources Cost Element Skill Department Units Curve CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 115.523.00 Dollars 115523 Dollars 46.439.32 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department Linear Factors 46439.3 Dollars Activity ID: 1B07603500 Description: 707 Cluster Demolition Cost Risk 1 Schedule Risk Line Item Description Units BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost Total Cost Quantity Hours/Unit Total Cost & Escalation TypeTotal Cost 2CDETSDM0 Demolition Execution - Trades 1.00 each HC 0 8.304.144 8.304.144 8.304.144 n 2CDETSDM9 **D&D B709 DEMOLITION EXECUTION** 1.00 each HC Λ 0 Λ 52.241 Λ 52.241 Λ 52.241 FF SYS Contingency And Escalation 1.00 ea 0 0 0 0 7.093.331 7.093.331 0 7.093.331 Total for Activity 1B07603500: 0 0 8.356.384 7.093.331 15.449.715 0 15.449.715 Line Item 2CDETSDM0 - Demolition Execution - Trades Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 BOE and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -Cost Element Skill Resources Department Curve A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proj B Estimating Only Linear 8.304.144.00 Dollars 8834195 Dollars 0.94 adi Factor Factors Line Item 2CDETSDM9 - D&D B709 DEMOLITION EXECUTION Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 BOE and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost . Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -Resources Cost Element Skill Units Department Curve **Ouantity** A5B CONSTRUCTION C120 D&D SKILLED TRADES KB20C Building Trades Proi B Estimating Only Linear 52.240.50 Dollars Factors 55575 Dollars 0.94 adi Factor Line Item SYS - Contingency And Escalation BOE Resources Cost Flement Skill Department Curve Quantity Units

ZDEPT No Department

CON CONTINGENCY

Factors 5229439 Dollars

0000 NONE

Linear

5.229.439.00 Dollars

WBS No: 1BAD16
Activity ID: 1B07603500

Rockv Flats Closure Proiect
Baseline Cost and Basis of Estimate

WBS Filter
Activity Filter
**

Baseline Devl
Baseline Cost and Basis of Estimate

Activity Filter

**

Baseline Devl
Baseline Cost and Basis of Estimate

**

Baseline Devl
Baseline Cost and Basis of Estimate

ESC ESCALATION 0000 NONE ZDEPT No Department Linear 1.863.893.00 Dollars

Factors 1863893 Dollars

Activity ID: 1B0	7604500 Description: Final Status Survey							Cost Risk	1 Schedule F	Risk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
2CFSSXFS0	Final StatusSurvey	1.00	each	НС	0	0	0	6.692.322		6.692.322	0	6.692.322
2CFSSXFS9	D&D Final Survey Bldg 709	1.00	each	HC	0	0	0	42.275	0	42.275	0	42.275
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.810.411	3.810.411	0	3.810.411
	To	tal for Activ	ity 1B07604	500·		0	0	6 734 597	3 810 411	10 545 008	0	10 545 008

Line Item 2CFSSXFS0 - Final StatusSurvey

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	552.660.00	Dollars
	Factors	552660 Dollars							
	A5H	SUBCONTRACTED SRVS	0000	NONE	KB30S	B707 Facility Disposition	Linear	6.139.662.00	Dollars

Factors 6139662 Dollars (contracted final status survey

Line Item 2CFSSXFS9 - D&D Final Survey Bldg 709

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor - Revised Unit Cost -

Basis for adjustment -

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	3.805.00	Dollars
	Factors	3805 Dollars							
	A5H	SUBCONTRACTED SRVS	0000	NONE	KB30S	B707 Facility Disposition	Linear	38.470.00	Dollars

Factors 38470 Dollars (contracted final status survey

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	2.661.227.00	Dollars
	Factors 2661227 Dollars						
	ESC ESCALATION	0000	NONE	ZDEPT No Department	Linear	1.149.184.00	Dollars

Factors 1149184 Dollars

Activity ID: 1B07	Description: IWCP Development - B778 Type 2 Bldg. Cost Risk 1 Schedule Risk 1											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		

Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

		Dase	enne Cost ai	iu basis di i	Sumate	Act	ivity Filter *		Ste	arts In FY *	
2CDPET2B0	D&D TYPE 2 BLDGS SET 17 PLANNING & ENGINEERING	1.00 each	n HC	611	611	17.695	58.809	0	76.505	6.123	82.627
2CDPET2B9	D&D BLDG 709 PLANNING & ENGINEERING	1.00 each	n HC	104	104	2.800	6.470	0	9.270	969	10.238
SYS	Contingency And Escalation	1.00 ea	EE	0	0	0	0	25.747	25.747	0	25.747
	Tot	al for Activity 1F	807700500		715	20 495	65 279	25 747	111 521	7.091	118 612

Line Item 2CDPET2B0 - D&D TYPE 2 BLDGS SET 17 PLANNING & ENGINEERING

BOE

WBS No:

Activity ID:

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -

1BAD17

1B07700500

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
Į	750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	34.14	Hours
r	Factors	1 Engineer		113.8 hours		0.3 adi Factor			
L	750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	88.30	Hours
r	Factors	1 enaineer		88.3 hours					
L	750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	86.50	Hours
ŕ	Factors	1 enaineer		173 hours		0.5 adi. Factor			
Į	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	242.40	Hours
ŕ	Factors	4 Engineers		242.4 hours		0.25 adi. Factor			
Į	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	99.84	Hours
ŕ	Factors	 Admin Assist. 		249.6 hours		0.2 adi. Factor			
Į	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	60.00	Hours
ŕ	Factors	2 D&D Workers (walkdowns)		30 hours					
Į	A52	TENERA	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	18.889.51	Dollars
ŕ	Factors	259.4 hours		72.82 \$/hr					
L	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	22.045.29	Dollars
г	Factors	6 planners	1	207.4 hours		63.27 Dollars per hour	0.28 adi. Factor		
Ļ	A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
г	Factors	11019 dollars		0 adi. Factor					
Ļ	A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2.721.36	Dollars
г	Factors	170.8 hours	1	53.11 \$/hr		0.3 adi. Factor			
Ļ	A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	9.445.92	Dollars
г	Factors	132.5 hours	1	71.29 \$/hr					
Ļ	A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2.559.54	Dollars
г	Factors	81.9 hours	1	96.16 \$/hr		0.5 adi. Factor	0.65 nuclear safety	ena.	
Į	A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	3.147.46	Dollars
г	Factors	101.4 hours		77.6 \$/hr	I.	0.4 adi. Factor			
Į	A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	0.00	Dollars
	E-atama	620042 Dowertool balance adi		O adi factor for 11 O 0/ raduction	n .				

Factors 620842 Powertool balance adj. adj factor for 11.9 % reduction

Line Item 2CDPET2B9 - D&D BLDG 709 PLANNING & ENGINEERING

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

6/22/00 9:32:34 PM Page 136 of 145 OFFICIAL USE ONLY

Baseline Devl Proiect **Rocky Flats Closure Project**

Starts In FY

:	1B07700500	Baseline Cost and Basis of Estimate	WBS Filter	1BAD
		Dascille Cost and Dasis of Estimate	Activity Filter	*
	Basis for adjustment -			

Resources

1BAD17

WBS No:

Activity ID:

	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	S100S	SSOC Salaried	Linear	5.20	Hours
actors	1 Engineer		5.2 hours					
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried	Linear	4.00	Hours
actors	1 engineer		4 hours					
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried	Linear	7.80	Hours
actors	1 enaineer		7.8 hours					
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	43.90	Hours
actors	1 Engineers		43.9 hours					
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Linear	22.60	Hours
actors	1 Admin Assist.		22.6 hours					
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	20.00	Hours
actors	2 D&D Workers (walkdowns)		10 hours					
A52	TENERA	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	859.28	Dollars
actors	11.8 hours		72.82 \$/hr					
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	3.562.10	Dollars
actors	1 planners		56.3 hours		63.27 Dollars per hour			
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	499.00	Dollars
actors	499 dollars							
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	408.95	Dollars
actors	7.7 hours		53.11 \$/hr				, ,	
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	427.74	Dollars
actors	6 hours		71.29 \$/hr				, ,	
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	355.79	Dollars
actors	3.7 hours		96.16 \$/hr		1		T	
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Qualitv	Linear	356.96	Dollars
actors	4.6 hours		77.6 \$/hr					

Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.625.23	Dollars
	Factors	18625.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7.121.41	Dollars

Factors 7121.41 Dollars

Activity ID: 1B07702500 Description: Equipment Stripout -Set 17-Type 2 Bldg Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDED8BD0	Type 2 Buildings	1.00	each	HC	13.091	13.091	335.986	171.774	0	507.760	116.251	624.011
2CDED8BD9	D&D Bldg 709 IWCP EXECUTION	1.00	each	HC	350	350	8.841	2.700	0	11.542	3.059	14.601
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	177.053	177.053	0	177.053
	Total for Activity 1B07702500:						344.827	174.474	177.053	696.354	119.310	815.664

Line Item 2CDED8BD0 - Type 2 Buildings

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -Revised Unit Cost -

Basis for adjustment -

WBS No: 1BAD17 Activity ID: 1B07702500

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter

Baseline Devl 1BAD

		ln	

			Activity Filter	*	Starts In FY *
esources Cost Element		Skill	Department	Curve	Ouantity Units
750 STRAIGHT TIME BASE	C120	D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	6.268.00 Hours
Factors 6268 Hours					
750 STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	1.945.00 Hours
Factors 1945 Hours			T		
750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	520.00 Hours
Factors 520 Hours					
750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	1.567.00 Hours
Factors 7683 Hours		0.20396 4 to 1 adi. Factor			
751 OVERTIME BASE & PRE.	C120	D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	1.254.00 Hours
Factors 1254 Hours	1				
751 OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	1.537.00 Hours
Factors 1537 Hours	1				
A5C SUPPLIES	0000	NONE	KB30S B707 Facility Disposition	Linear	104.352.00 Dollars
Factors 104352 Dollars					
A5H SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	67.422.00 Dollars
Factors 67422 Dollars					

Line Item 2CDED8BD9 - D&D Bldg 709 IWCP EXECUTION

BOF

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

Cost Element	Skill	Department	Curve	Quantity Units
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	160.00 Hours
Factors 160 Hours				
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	50.00 Hours
Factors 50 Hours				
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition	Linear	60.00 Hours
Factors 60 Hours				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIG	KB50H B707 Eng Envir. Sftv & Quality	Linear	40.00 Hours
Factors 160 Hours	0.25 4 to 1 adi. Factor			
751 OVERTIME BASE & PRE.	C120 D&D SKILLED TRADES	KB30H B707 Facility Disposition	Linear	20.00 Hours
Factors 20 Hours				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIC	KB50H B707 Eng Envir. Sftv & Quality	Linear	20.00 Hours
Factors 20 Hours				
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	2.000.00 Dollars
Factors 2000 Dollars				
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB30S B707 Facility Disposition	Linear	700.00 Dollars
Factors 700 Dollars				

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
L	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	128.080.80	Dollars
-	Factors	128081 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	48,972.07	Dollars
	Factors	48972.1 Dollars							

Activity ID: 1B07703500 Description: IWCP Execution Trades - Type 2 Bldg. (731/778)

6/22/00 9:32:35 PM *OFFICIAL USE ONLY*

1 Schedule Risk

Cost Risk

WBS No: 1BAD17 Activity ID: 1B07703500

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Baseline Devl Proiect 1BAD WBS Filter

Acti

tivity Filter *		Ste	arts In FY *	
Materials/ Sub	Contingency	Total Prime	Burden Cost	Total C

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDET8BD0	Type 2 Buildings	1.00	each	HC	0	0	0	2.465.726	0	2.465.726	0	2.465.726
2CDET8BD9	D&D Bldg 709 IWCP EXECUTION TRADES	1.00	each	HC	0	0	0	38.106	0	38.106	0	38.106
SYS	Contingency And Escalation		ea	EE	0	0	0	0	711.288	711.288	0	711.288
Total for Activity 1B07703500: 0								2.503.832	711.288	3.215.120	0	3.215.120

Line Item 2CDET8BD0 - Type 2 Buildings

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resource

rces		Cost Element		Skill	Department	Curve	Ouantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C Building Trades Proi B Estimating Only	Linear	2.465.726.00	Dollars

4483137 Dollars 0.55 adi Factor Factors

Line Item 2CDET8BD9 - D&D Bldg 709 IWCP EXECUTION TRADES

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resour

urces		Cost Element	Skill			Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	C120	D&D SKILLED TRADES	KB20C	Building Trades Proi B Estimating Only	Linear	38.106.00	Dollars

38106 Dollars Factors

Line Item SYS - Contingency And Escalation

BOE

Resource

ces		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	430.847.90	Dollars
	Factors	430848 Dollars					·		
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	280.440.30	Dollars
	Factors	280440 Dollars							

WBS No: 1BAD	BA Title: Decommissioning Project	Manageme	nt									
Activity ID: 1B07	Description: D&D DOP							Cost Risk	1 Schedule R	Pisk 1		
Line Item	Description	Quantity	Units E	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
			7	Гуре	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDOPXDP0	B707 D&D DOP	1.00	each	нс	0	0	0	53.136	0	53.136	0	53.136
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1.027	1.027	0	1.027
Total for Activity 1B07DDOP01:							0	53.136	1.027	54.163	0	54.163

Line Item 2CDOPXDP0 - B707 D&D DOP

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity

> Page 139 of 145 6/22/00 9:32:36 PM OFFICIAL USE ONLY

Baseline Devl Proiect **Rocky Flats Closure Project** WBS Filter 1BAD **Baseline Cost and Basis of Estimate**

Activity Filter

Starts In FY

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

Units Cost Element Skill Department A52 TENERA P160 TECHNICAL WRITERS AND EDITOR | KB30S | B707 Facility Disposition Linear 53.136.00 Dollars

Writer Days (4 months) Dollars per hour Factors Hours per day 72

Line Item SYS - Contingency And Escalation

1BADBA

1B07DDOP01

BOE

WBS No:

Activity ID:

Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	598.37	Dollars
	Factors	598.369 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	428.45	Dollars

Factors 428.450 Dollars

Activity ID: 1B07DDRA01 Description: D&D Readiness Assessment Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDRAXRA3	D&D Readiness Assessment - Closeout/Corrective Act	1.00	each	HC	80	80	2.098	11.520	0	13.618	1.011	14.630
2CDRAXRA4	Plan of Action Development	1.00	each	HC	0	0	0	204.000	0	204.000	0	204.000
SYS	Contingency And Escalation 1				0	0	0	0	6.053	6.053	0	6.053
	Total for Activity 1B07D					80	2.098	215.520	6.053	223.672	1.011	224.683

Line Item 2CDRAXRA3 - D&D Readiness Assessment - Closeout/Corrective Act

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	P170 OTI	HER ADMINISTRATIVE & PROFE	KB30S	B707 Facility Disposition	Linear	80.00 Hours
Factors	2 Fac Disp Staff	. 40	0 Hours				
A52	TENERA	P170 OTI	HER ADMINISTRATIVE & PROFE	KB30S	B707 Facility Disposition	Linear	5.760.00 Dollars
Factors	2 Fac Disp Subs	40	0 Hours		72 Dollars per hour		
A57	LATA	P170 OTI	HER ADMINISTRATIVE & PROFE	KB30S	B707 Facility Disposition	Linear	5.760.00 Dollars
Factors	2 Fac Disp Subs	40	0 Hours		72 Dollars per hour		

Line Item 2CDRAXRA4 - Plan of Action Development

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

es		Cost Element		Skill		Department		Curve	<i>Ouantity</i>	Units
	A52 TENERA	4	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition		Linear	102.000.00	Dollars
1	Factors 1	Subcontractor		40 Hours per week		30 weeks	85	Dollars per h	our	
	A57 LATA		E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition		Linear	102.000.00	Dollars
7	Factors 1	Subcontractor		40 Hours per week		30 weeks	85	Dollars per h	our	

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.527.60	Dollars
	Factors	3527.6 Dollars							
		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.525.87	Dollars

Factors 2525.87 Dollars

Activity ID: 1B07DDTNG1 Description: D&D RA/Core Training Cost Risk 1 Schedule Risk

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CRATXRA1	D&D Readiness Assessment - Preparatory Training	1.00	each	HC	7.470	7.470	161.654	46.000	0	207.654	77.109	284.763
2CRATXRA3	D&D Training	1.00	each	HC	17.850	17.850	382.228	0	0	382.228	182.323	564.551
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	45.027	45.027	0	45.027
	To		25.320	543.882	46.000	45.027	634.909	259,432	894.340			

Line Item 2CRATXRA1 - D&D Readiness Assessment - Preparatory Training

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

Resources

s	Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir, Sfty & Quality		Linear	90.00	Hours
Factors	2 SMEs		5 Hours per week		9 weeks				
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition		Linear	800.00	Hours
Factors	2 Foreman		40 Hours per week		5 weeks	2	Crews		
750	STRAIGHT TIME BASE	M040	MANAGERS (GRADE 64 - 68)	KB30S	B707 Facility Disposition		Linear	90.00	Hours
Factors	2 CCAs		5 hours per week		9 weeks				
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KB20H	B707 Facilities Management		Linear	90.00	Hours
Factors	2 SOEs		5 Hours per week		9 weeks				
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality		Linear	1.200.00	Hours
Factors	3 RCTs		40 Hours per week	,	5 weeks	2	Crews		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition		Linear	5.200.00	Hours
Factors	13 D&D Workers		40 hours per week	,	5 weeks	2	Crews		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition		Linear	46.000.00	Dollars
Factors	46000 Dollars								

Line Item 2CRATXRA3 - D&D Training

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title

Units - 1 lot Unit Cost -

Page 141 of 145 6/22/00 9:32:37 PM *OFFICIAL USE ONLY*

Starts In FY

WBS No: 1BADBA **Rocky Flats Closure Project** 1B07DDTNG1 Activity ID: **Baseline Cost and Basis of Estimate**

Proiect Baseline Devl WBS Filter

1BAD Activity Filter

Starts In FY *

Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -

Resources

es		Cost Element		Skill			Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010 FOR	REMEN / TEAM LEADS / GROUP	KB30S	B707 Fac	ility Disposition		Linear	2.380.00	Hours
_	Factors	2 Foreman	40	O Hours per week		4.25	weeks	7	Crews		
	750	STRAIGHT TIME BASE	T060 D&I	D HAZ REDUC TECH / RISK RED	KB30H	B707 Fac	ility Disposition		Linear	15.470.00	Hours
	Factors	13 D&D Workers	40	0 hours per week		4.25	weeks	7	Crews		

Line Item SYS - Contingency And Escalation

Resources

es		Cost Element		Skill		Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	27.167.77	Dollars
	Factors	27167.8 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.859.16	Dollars

Factors 17859.2 Dollars

Activity ID: 1B1B0707PM

Description: PROJECT MANAGEMENT	Cost Risk	2	Schedule Risk	2
---------------------------------	-----------	---	---------------	---

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CDPM0000	D&D 707 CLUSTER PROJECT MGMT	1.00	each	HC	50.779	50.779	1.715.924	11.043.520	0	12.759.444	623.785	13.383.229
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.116.120	3.116.120	0	3.116.120
	Tot	al for Activi	ty 1B1B0707	PM:		50.779	1.715.924	11.043.520	3.116.120	15.875.564	623.785	16.499.349

Line Item 2CDPM0000 - D&D 707 CLUSTER PROJECT MGMT

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

es	Cost Element		Skill		Department	Curve	Ouantity Units
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	S100S	SSOC Salaried	Linear	9.448.20 Hours
Factors	2 Engineers/SMEs		8145 hours		0.58 adi. Factor		
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	KB30S	B707 Facility Disposition	Back Loaded	8.145.00 Hours
Factors	1 Admin Assistants		8145 hours				
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	KB30S	B707 Facility Disposition	Back Loaded	10.040.00 Hours
Factors	2 Managers		5020 hours				
750	STRAIGHT TIME BASE	M040	MANAGERS (GRADE 64 - 68)	KB30S	B707 Facility Disposition	Linear	7.246.00 Hours
Factors	1 Managers		7246 hours				
750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	S100S	SSOC Salaried	Linear	15,900.00 Hours
Factors	2 Planners/Planner Support		7950 hours				
A52	TENERA	M040	MANAGERS (GRADE 64 - 68)	KB30S	B707 Facility Disposition	Back Loaded	456,820.00 Dollars
Factors	1 Manager		5020 hours		91 \$/hour		
A53	E-2	P170	OTHER ADMINISTRATIVE & PROFE	KB30S	B707 Facility Disposition	Linear	867,938.10 Dollars
Factors	2 Other Admin & Professiona	ls	7445 hours		58.29 \$/hour		
A57	LATA	E130	OTHER ENGINEERS	KB30S	B707 Facility Disposition	Linear	1,131,938.00 Dollars
Factors	2 Engineers/Tech Support Pe	rsonnel	7445 hours		76.02 \$/hour		
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KB30S	B707 Facility Disposition	Linear	1.508.990.00 Dollars
Factors	3 Cost Analysts/Planners/Sch	edulers	7950 hours		63.27 \$/hour		
A5C	SUPPLIES	0000	NONE	KB30S	B707 Facility Disposition	Linear	4.619.972.00 Dollars
Factors	9525715 dollars		0.485 adi. Factor				

Rocky Flats Closure Project 1BAD Activity ID: 1B1B0707PM WBS Filter **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY A5H SUBCONTRACTED SRVS E130 OTHER ENGINEERS KB30S B707 Facility Disposition 1.208.718.00 Dollars Linear Engineers/Tech Support Personnel 7950 hours 76.02 \$/hour 949.544.10 Dollars A5H SUBCONTRACTED SRVS P170 OTHER ADMINISTRATIVE & PROFE KB30S B707 Facility Disposition Linear 58.29 \$/hour Factors 2 Other Admin & Professionals 8145 hours A5L RENTALS NONE KB30S B707 Facility Disposition Linear 162,000,00 Dollars Factors 10 rentals \$/month months 450 A5L RENTALS 0000 NONE KB30S B707 Facility Disposition 48.000.00 Dollars Max Backload 1000 \$/month Factors 4 temp, trailers months A5M TRAVEL/TRAIN/RELOCAT KB30S B707 Facility Disposition 89.600.00 Dollars 0000 NONE Linear Factors 4 travels/year vears 1400 dollars/travel people Line Item SYS - Contingency And Escalation BOE Cost Element Skill Department Curve **Ouantity** Units Resources CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 2.044.487.00 Dollars 2044487 Dollars Factors 0000 NONE 1.071.633.00 Dollars ESC ESCALATION ZDEPT No Department Linear 1071633 Dollars WBS No: 1BADBB **Decommissioning Support Services** Description: SITE SUPPORT Activity ID: 1B1B0707SS Cost Risk 2 Schedule Risk Line Item BOELabor Labor Hours Labor Cost Materials/ Sub Contingency Total Prime Burden Cost Description **Ouantity** Units Total Cost Type Hours/Unit Total **Total** Cost & Escalation Cost 2CDSS0ALL D&D B707 CLUSTER SITE SUPPORT HC 51.199 1.477.743 12.176.133 0 13.653.876 532.824 1.00 each 51.199 14.186.699 Contingency And Escalation 1.00 ea FF SYS 0 0 3.617.117 3.617.117 0 3.617.117 3.617.117 17.270.993 17.803.817 Total for Activity 1B1B0707SS: 51.199 1.477.743 12.176.133 532.824 Line Item 2CDSS0ALL - D&D B707 CLUSTER SITE SUPPORT Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications. Item Desc - Similar B771 and B779 Activity Breakdown of Historical Data: Item - See Line Item Title Units - 1 lot Unit Cost -Unit Cost Adjustment factor -Revised Unit Cost -Basis for adjustment -Resources Cost Element Cl-iII Denartment Ilmite 750 STRAIGHT TIME BASE C100 AUTO MECHANIC KT10H Non Project Steelworkers Linear 3.020.00 Hours **Equipment Mechanics** 5000 hours 0.302 adi. Factor Factors 750 STRAIGHT TIME BASE E120 SAFETY ENGINEERS KB50S B707 Eng Envir. Sftv & Quality 4.070.36 Hours Linear 2 Safety engineers 6739 hours 0.302 adi. Factor Factors 750 STRAIGHT TIME BASE OTHER ENGINEERS K107S Eng. Envir. Safety & Quality Programs Linear 2.174.40 Hours F130 Other engineers/tech support 7200 hours 0.302 adi. Factor 750 STRAIGHT TIME BASE E130 OTHER ENGINEERS K266S Envir. Safety. Health & Quality Linear 1.661.00 Hours Other engineers/tech support 5500 hours 0.302 adi. Factor 750 STRAIGHT TIME BASE E130 OTHER ENGINEERS KB20S B707 Facilities Management Linear 4.348.80 Hours Other engineers/tech support 7200 hours 0.302 adi. Factor 750 STRAIGHT TIME BASE ADMINISTRATIVE ASSISTANTS B707 Facilities Management Linear 1.963.00 Hours 0.302 adi. Factor Admin Assistants 6500 hours Factors M010 FOREMEN / TEAM LEADS / GROUP 750 STRAIGHT TIME BASE KB50S B707 Eng Envir. Sftv & Quality Linear 23.340.00 Hours RCT Foremen Factors 3 7780 hours 750 STRAIGHT TIME BASE P150 TRAINERS K288S Training Integration 1.894.45 Hours Linear 0.302 adi, Factor Factors 1 Trainers & Admin 6273 hours

WBS No:

1BADBA

Page 143 of 145 6/22/00 9:32:38 PM OFFICIAL USE ONLY

Baseline Devl

Proiect

WBS No: 1BADBB 1B1B0707SS Activity ID:

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter

Baseline Devl 1BAD

	Daseille Cost all	Activity Filter	*	Starts In FY *
751 OVERTIME BASE & PRE.	L080 SECURITY GUARDS	W207H Protective Force 5-Davs	Linear	5.226.00 Hours
Factors 2 Guards	2613 hours			
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	3.501.00 Hours
Factors 3 RCT Foremen	1167 hours (15% OT)			
A57 LATA	P160 TECHNICAL WRITERS AND EDITOR	KB10S B707 Program Management	Linear	356.559.50 Dollars
Factors 2 Technical Writers	4500 hours	58.78 \$/hour	0.674 adi. Factor	
A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition	Linear	3.974.303.00 Dollars
Factors 1.4E+07 Dollars	0.28145 adi. Factor			
A5F CSS FIXED PRICE	0000 NONE	KB30S B707 Facility Disposition	Back Loaded	4.487.484.00 Dollars
Factors 4487484 Dollars	laundry for FY03-05			
A5H SUBCONTRACTED SRVS	E080 NUCLEAR (CRITICALITY) ENGINEER	K266S Envir. Safetv. Health & Quality	Linear	115.872.80 Dollars
Factors 1 Criticality Safety Eng	1205 hours	96.16 \$/hour		
A5H SUBCONTRACTED SRVS	E110 QUALITY CONTROL ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	1.088.152.00 Dollars
Factors 3 Quality Control Engineers	s 7300 hours	73.72 \$/hour	0.674 adi. Factor	
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	KB50S B707 Eng Envir. Sftv & Quality	Linear	1.087.265.00 Dollars
Factors 3 Industrial Hygenists	7945 hours	67.68 \$/hour	0.674 adi. Factor	
A5H SUBCONTRACTED SRVS	P150 TRAINERS	KB10S B707 Program Management	Linear	606.842.70 Dollars
Factors 3 Trainers	6000 hours	50.02 \$/hour	0.674 adi. Factor	
A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	KB50S B707 Eng Envir. Sftv & Quality	Linear	459.654.50 Dollars
Factors 2 Other Admin & Profession	nals 6500 hours	52.46 \$/hour	0.674 adi. Factor	

Line Item SYS - Contingency And Escalation

BOE

Resources

es		Cost Element	Skill			Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2.369.883.00	Dollars
	Factors	2369883 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.247.235.00	Dollars

1247235 Dollars

WBS No: 1BADBB01 Title: Decommissioning Support Services Labor												
Activity ID: 1B07WOPS01 Description: 707 D&D - Waste OPS Cost Risk 2 Schedule Risk 2												
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
2CWOPXWH0 D&D Waste Handling Support		1.00	each	HC	150.587	150.587	3.474.150	7.003.751	0	10.477.900	1.216.462	11.694.363
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.089.325	3.089.325	0	3.089.325
	Total for Activity 1B07WOPS01:					150.587	3.474.150	7.003.751	3.089.325	13.567.225	1.216.462	14.783.687

Line Item 2CWOPXWH0 - D&D Waste Handling Support

BOE

Historical Data Source - BOE was developed utilizing both historical costs and estimator experience from previously preformed similar activities from B779 and B771. BOE elements accumulated from B779 and B771 were entered into estimating software (Powertool), and these elements were reviewed, validated, modified, and then applied towards B707 specifications.

Item Desc - Similar B771 and B779 Activity

Breakdown of Historical Data:

Item - See Line Item Title

Units - 1 lot Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

Resources

s	Cost Element	Skill			Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KB30S	B707 Facility Disposition	Linear	8.250.00 H	lours
Fa	actors 8250 Hours							
	750 STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir, Sftv & Quality	Linear	21.789.00 H	lours
Fa	actors 3 RCTs		9 hrs/day		807 days			
	750 STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KB30H	B707 Facility Disposition	Linear	94,419.00 H	iours
Fa	actors 13 D&D Workers		9 hrs/day		807 days			

Page 144 of 145 6/22/00 9:32:39 PM OFFICIAL USE ONLY

WBS No: Activity ID:	1BADBB01 1B07WOPS01	1100111 1 1010	Closure Proiect nd Basis of Estimate	Proiect WBS Filter Activity Filter	Baseline Devl 1BAD	Starts In FY	*
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition		Linear	1.650.00	Hours
	Factors 1650 Hours (20% OT) 751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB30S B707 Facility Disposition		Linear	1.237.00	Hours
	Factors 1237 Hours (15% OT)	I MOTO IFOREMENT TEAM LEADS / GROOP	RB303 IB/0/ Facility Disposition		Lilleal	1.237.001	nouis
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Qua	litv	Linear	4.358.00	Hours
	Factors 4358 Hours (20% OT) 751 OVERTIME BASE & PRE.	T060 D&D HAZ REDUC TECH / RISK RED	KB30H B707 Facility Disposition		Linear	18.884.00	Hours
	Factors 18884 Hours (20% OT)	I 1000 ID&D HAZ REDUC TECH / RISK RED	RB30H IB/0/ Facility Disposition		Lilleal	10.004.001	nouis
	A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition		Linear	6.670.000.00	Dollars
	Factors 6670000 Dollars for waste supplies A5C SUPPLIES	0000 NONE	KB30S B707 Facility Disposition		Linear	333.750.50	Dollare
	Factors 1335002 Powertool balance adj.	0.25 remv part of adjmnt to supp			Lilleal	333.730.301	Dullais
Line Item SYS	S - Contingency And Escalation						
BOE							
Resources	Cost Element	Skill	Department		Curve	Ouantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department		Linear	2.034.894.00	Dollars
	Factors 2034894 Dollars						
	ESC ESCALATION	l 0000 INONE	ZDEPT No Department		Linear	1.054.430.00	Dollars
	Factors 1054430 Dollars						

Report Totals: Total Prime Labor Hours Labor Cost Materials/ Sub Contingency Burden Cost Total Cost Total Cost Cost 1.392.402 34.065.545 75.486.173 35.181.019 144.732.737 12.135.501 156.868.238

Page 145 of 145 6/22/00 9:32:49 PM OFFICIAL USE ONLY